

U.S. House of Representatives
Committee on Oversight and Government Reform
Darrell Issa (CA-49), Chairman



The Department of Energy's Disastrous Management of Loan Guarantee Programs

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Executive Summary

After conducting a substantial review of the Department of Energy's (DOE) loan guarantee program, it is clear that the significant losses absorbed by taxpayers as a result of Solyndra's collapse is just the beginning. The investigation conducted by the House Committee on Oversight and Government Reform has uncovered numerous examples of dysfunction, negligence and mismanagement by DOE officials, raising troubling questions about the leadership at DOE and how it has administered its loan guarantee programs.

By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling more than \$14.5 billion in guaranteed loans. Inexplicably, DOE management has turned a blind eye to the risks that have been glaringly apparent since the inception of the program.

This report will demonstrate how DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances demonstrating that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration.

DOE has overseen a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses. Not only does it appear that DOE purposely directed taxpayer funds at a failing enterprise, DOE's action robbed taxpayers of genuine investment toward renewable energy.

Key Findings

- The Committee has identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio that could ultimately result in substantial loss of taxpayer dollars. (pg. 3)
- From the very inception of the program, warnings signs existed pointing to a likely loss of taxpayer dollars that went ignored by Administration officials. (pg. 7)
- DOE invested a disproportionate amount of its funds into solar technology leaving taxpayers vulnerable by overemphasizing a single technology. 16 of the 27 1705-backed projects employed solar technology – that represented 80 percent of DOE’s funds. (pg. 7)
- The billions of dollars in loan guarantees and cash grants directed at a Spanish firm, Abengoa, reveal the excessive risks associated with directing that volume of subsidy to a single firm. Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio – which received an extraordinarily low CCC rating and was still approved by DOE for a direct loan to the project. This overinvestment in this single firm will likely cause substantial harm to the taxpayer. (pg. 12)
- DOE’s failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments has created a significant moral hazard that has created enormous risks for DOE and taxpayer funds. (pg. 14)
- Beacon Power Corp, the second recipient of a § 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010. Eighteen months later, Beacon declared bankruptcy – leaving taxpayers to repay the loan. (pg. 13)
- BrightSource Energy, recipient of a \$1.6 billion loan guarantee to build a solar generation facility, has spent more than \$56 million on a desert tortoise relocation program. BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire \$1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on construction thus far. (pg. 14)
- DOE has engaged in a disturbing pattern of suspending the approval of a credible project that adheres to all stated standards, only to later approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE’s favoritism significantly harmed numerous companies that had relied on the promise of 1705 financing. The perception is that DOE actively misleads applicants about the status of their loan application, thereby encouraging these firms to misallocate capital, which has led to financial harm. (pg. 17-19)

- DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances showing that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration. (pg. 22)
- Substantial evidence indicates that in two cases officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar. Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudential requirements. (pg. 23-28)
- There appears to be a significant amount of evidence indicating that DOE manipulated analysis and strategically modified evaluations in order to issue loans to First Solar that would qualify under the statutory guidelines. An application that should otherwise fail, but instead passes under improper influence and through manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets. (pg. 32)
- DOE Violated the Statutory Requirement that Projects Commence Construction by September 30, 2011. (pg. 32)
- In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people. The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading and attempt to pass off jobs that already existed as new jobs. (pg. 37-40)
- Solopower accepted \$40 million of Oregon taxpayer money in addition to DOE's approval of a \$197 million loan via the Federal Financing Bank (FFB). They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P) which predicted that Solopower will fail to meet its debt obligations. (pg. 47)
- Despite warnings from both S&P and its own internal analysis regarding risky business models, DOE proceeded with a \$25 million grant for Beacon Power. In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating noting that "Beacon is currently an unprofitable start-up" and that "significant exposure to commodity price volatility" could significantly hurt the company. S&P ran two default scenarios, both of which demonstrated that taxpayers would lose millions. (pg. 49)

- Fitch Ratings evaluated the Abound Solar project, which was approved for a \$400 million conditional loan guarantee, and assigned it a junk credit rating. Fitch gave the project a credit rating of “B” (worse than Solyndra’s) with a recovery estimate of only 45%. Fitch labeled the project “highly speculative” and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures. Abound Solar announced on March 1st that it would stop producing solar panels and would fire 180 employees, even though it has already received \$70 million from DOE. (pg. 50-51)
- On June 15, 2010, DOE announced that it would conditionally issue a \$98.5 million partial loan guarantee to Nevada Geothermal Power Company. The loan did not finance any new construction and therefore did not help to create a single new job. Yet, in the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain’s potential, with Senator Reid stating, “I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence...” DOE’s awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with well-established financial difficulties. Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW. According to Nevada Geothermal’s financial statements, the firm would not avoid default without the benefit of a loan guarantee. (pg. 53-54)

I. Introduction

A. A History of Federal Government Loan Guarantees

For decades federal loan guarantees supported a variety of policy objectives, “including home ownership, university education, small business growth, international development, and others.”¹ In 1976, the Congressional Budget Office (CBO) defined loan guarantees as “a loan or security on which the federal government has removed or reduced a lender’s risk by pledging to repay principal and interest in case of default by the borrower.”² Loan guarantees supporting “clean” energy-related projects began in the 1970s as a response to the perception of record high oil prices for the foreseeable future and the notion that the country was in the midst of an “energy crisis.”³

The Energy Security Act of 1980 authorized \$20 billion for the development of a synthetic fuels industry via a new government enterprise, the U.S. Synthetic Fuels Corporation (SFC).⁴ Loan guarantees were among the public finance tools available to SFC. The Great Plains coal gasification project was the only one of the five SFC projects to utilize a loan guarantee. The Great Plains project (located in Beulah, ND), “which converts lignite coal into pipeline-quality methane (the primary component of natural gas), received a \$2 billion federal loan guarantee (approximately \$1.5 billion of the loan guarantee was actually used) to construct the plant.”⁵ Because the value proposition of the project hinged on gas prices remaining high for a long period of time, in 1985, when gas prices dropped below the level at which Great Plains was cost competitive, the project “was not able to meet debt service requirements and subsequently defaulted on its loan obligations.”⁶

The Office of Alcohol Fuels at DOE, created by the Energy Security Act of 1980, had the authority to issue \$265 million in loan guarantees for projects related to alcohol fuels.⁷ Three projects received loan guarantees. Of them, “one had to refinance its loan, one experienced technology performance complications, and one ceased operations.”⁸ After the failures of loan guarantees via the Energy Security Act of 1980, clean energy loan guarantees were not again funded until the American Recovery and Reinvestment Act of 2009.⁹

A recent report from the Congressional Research Service points out that in 1976 the Congressional Budget Office (CBO) identified inherent problems with loan guarantees that were relevant then and are still relevant today. The background paper, titled “Loan Guarantees:

¹ PHILLIP R. BROWN, CONGRESSIONAL RESEARCH SERVICE, LOAN GUARANTEES FOR CLEAN ENERGY TECHNOLOGIES: GOALS, CONCERNS, AND POLICY OPTIONS (Jan. 17, 2012), *available at* <http://www.crs.gov/pages/Reports.aspx?PRODCODE=R42152&Source=search>, [hereinafter Brown]

² CONGRESSIONAL BUDGET OFFICE, LOAN GUARANTEES: CURRENT CONCERNS AND ALTERNATIVES FOR CONTROL (Aug. 1978).

³ Brown, *supra* note 1.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ Title XVII of the Energy Policy Act of 2005 created the renewable energy loan guarantee program at the Department of Energy but did not provide funding for loan guarantees. *See generally* 42 U.S.C. §§ 16511-16514.

Current Concerns and Alternatives for Control,” explains that loan guarantees disorient risk evaluation:

When commercial lenders originate loans that are guaranteed by the government, these lenders may be more concerned with the adequacy of the loan guarantee agreement than by the actual risk of the project. As a result, projects may not receive an adequate amount of due diligence by the lender, therefore increasing the federal government's risk exposure.¹⁰

The CBO also notes that “while such guarantees reduce the risk of loss to lender and borrower, they cannot reduce the project's risk of economic failure.”¹¹ Furthermore, the paper explains that loan guarantees can be attractive to Congress because the costs, on paper, appear small but fail to fully account for unforeseen risks.¹² Failing to heed these warnings has led to widespread taxpayer losses from loan guarantees, from Great Plains in 1985 to Solyndra and Beacon Hill in 2011.

B. An Overview of the DOE Section 1703 and 1705 Loan Programs

Congress first authorized the Department of Energy's Loan Guarantee Program under title XVII of the Energy Policy Act of 2005.¹³ The program purportedly incentivizes energy innovation by making it easier for companies to secure loans for projects that employ new technologies to promote energy efficiency, renewable energy, and advanced transmission.¹⁴ Section 1703 specifically authorizes the Secretary of Energy to make loan guarantees for projects that employ innovative technology to reduce greenhouse gas emissions.¹⁵ To date, the DOE has conditionally approved three projects under § 1703, totaling \$10.4 billion in guaranteed loans.¹⁶

The American Recovery and Reinvestment Act of 2009 significantly expanded the Secretary's loan guarantee authority under a newly-created § 1705.¹⁷ This section authorized the Secretary to issue loan guarantees for renewable energy projects – including those employing *non-innovative* technologies – that commenced construction no later than September 30, 2011.¹⁸ Additionally, in contrast to loan guarantees issued under § 1703, the project sponsor did not have to pay for the cost of the loan guarantee because the government covered the credit subsidy

¹⁰ Brown, *supra* note 1.

¹¹ *Id.*

¹² *Id.*

¹³ 42 U.S.C. §§ 16511-16514.

¹⁴ U.S. DEP'T OF ENERGY LOAN GUARANTEE PROGRAM, LOAN GUARANTEE SOLICITATION ANNOUNCEMENT: FED. LOAN GUARANTEES FOR PROJECTS THAT EMPLOY INNOVATIVE ENERGY EFFICIENCY, RENEWABLE ENERGY, AND ADVANCED TRANSMISSION AND DISTRIBUTION TECH. (July 29, 2009) [hereinafter Innovative Solicitation].

¹⁵ 42 U.S.C. § 16513(a)

¹⁶ U.S. Dep't of Energy Loan Programs Office, List of Programs, *available at* https://lpo.energy.gov/?page_id=45

¹⁷ 42 U.S.C. § 16516

¹⁸ 42 U.S.C. § 16516(a)

costs.¹⁹ The short timeframe for eligibility and the congressional appropriation of the credit subsidy cost reflect § 1705's primary purpose: economic stimulus.²⁰

The DOE issued its first § 1705 loan guarantee solicitation on July 29, 2009.²¹ By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling over \$14.5 billion in guaranteed loans.²² The DOE's Loan Programs Office awards and administers loan guarantees under three sets of official rules: the statutory requirements of § 1703 and 1705, the departmental regulations issued pursuant to statute, and the department's formal solicitations for loan guarantee applications.²³ Naturally, these rules describe the eligibility requirements with increasing specificity. The redundancy and specificity of these criteria testifies to their importance; such prudential regulations make the difference between responsible stewardship of the program and a taxpayer-financed earmark.

This initial report focuses on the Department of Energy's portfolio of loan guarantees issued under § 1705 of Title XVII. These loan guarantees were issued under two solicitations which differed in their eligibility requirements and financing method. The first solicitation targeted projects that employed innovative technologies.²⁴ Under this solicitation, the project sponsor could acquire the underlying loan from U.S. government through the Federal Financing Bank.²⁵ The second solicitation created the "Financial Institution Partnership Program."²⁶ This program accepted projects that employed *non-innovative* (i.e., already commercialized) technology, but required the project sponsor to acquire the underlying loan from a private financial institution.²⁷

Committee staff evaluated renewable energy projects that received loan commitments from DOE or from private lenders partnering with DOE. Staff identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio. In this report, we consider all aspects of loan commitments in the context of the broader marketplace to reveal the extent of the risk taxpayers face as a result of competition within the domestic energy industry and the global renewable energy industry.

C. Overview and Brief History of the ATVM Program

¹⁹ Innovative Solicitation, *supra* note 14 ("the Recovery Act provides that five billion nine hundred sixty five million dollars (\$5,965,000,000) in appropriated funds be made available until expended to pay the Credit Subsidy Costs").

²⁰ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

²¹ Innovative Solicitation, *supra* note 14.

²² U.S. Dep't of Energy Loan Programs Office, List of Programs, *available at* https://lpo.energy.gov/?page_id=45

²³ 42 U.S.C. §§16511-16516; 10 C.F.R. § 609 (2011); Innovative Solicitation, *supra* note 14; U.S. DEP'T OF ENERGY LOAN GUARANTEE PROGRAM OFFICE, LOAN GUARANTEE SOLICITATION ANNOUNCEMENT: FED. LOAN GUARANTEES FOR COMMERCIAL TECH. RENEWABLE ENERGY GENERATION PROJECTS UNDER THE FIN. INST. P'SHIP PROGRAM (Oct. 7, 2009) [hereinafter FIPP Solicitation].

²⁴ Innovative Solicitation, *supra* note 14.

²⁵ *Id.*

²⁶ FIPP Solicitation, *supra* note 23.

²⁷ *Id.*

The Advanced Technology Vehicle Manufacturing (ATVM) Program was created in 2008 as part of § 136 of the Energy Independence and Security Act of 2007.²⁸ According to the U.S. Department of Energy (DOE), the purpose of the ATVM Program is to provide “direct loans to support the development of advanced technology vehicles and associated components in the United States.”²⁹ The Energy Independence and Security Act set aside \$25 billion for direct loans and appropriated another \$7.5 billion to support these loans.³⁰ To qualify for a direct loan under the ATVM Program, the project and the sponsoring company must meet several criteria. First, in order to be eligible for a loan a company must either manufacture an advanced technology vehicle (ATV) or manufacture components for ATVs. Companies must also be “financially viable without the receipt of additional federal funding for the proposed project other than the ATVM loan.”³¹ DOE defines “advanced technology vehicle” as a light duty vehicle that meets Clean Air Act regulations established by the U.S. Environmental Protection Agency (EPA) and is 125 percent of the average of the Corporate Average Fuel Economy (CAFE) for similar vehicles.³² The loan must finance the reequipping, expanding, or establishing of a manufacturing facility in the United States or the costs of engineering integration performed in the United States.³³

As of February 2012, the ATVM Program loaned \$8.3 billion to five projects.³⁴ Most notably, two of the largest companies in the country, Ford Motor Company and Nissan North America, received over \$7.3 billion to retool and upgrade manufacturing facilities for vehicles that were deemed ATVs by DOE.³⁵ Fisker Automotive and Tesla Motors received \$529 million and \$465 million, respectively, from the ATVM program.³⁶ Fisker produces plug-in hybrid electric vehicles in a manufacturing plant in Delaware.³⁷ Its first vehicle, the Karma, costs well over \$100,000 to purchase.³⁸ Tesla produces three models of plug-in electric cars at its manufacturing plant in California. Finally, The Vehicle Production Group LLC received a \$50 million loan to support the creation of a factory-built wheelchair vehicle that runs on compressed natural gas.³⁹ DOE had conditionally granted a loan of \$730 million to Severstal North America, a steel subsidiary of OAO Severstal, a multi-billion dollar Russian company, to produce

²⁸ Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

²⁹ U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* https://lpo.energy.gov/?page_id=43

³⁰ Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

³¹ U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* https://lpo.energy.gov/?page_id=43

³² Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

³³ U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, *available at* https://lpo.energy.gov/?page_id=43

³⁴ *Id.*

³⁵ *Id.*

³⁶ U.S. Dep’t of Energy Loan Programs Office, Projects: Fisker Automotive, *available at* <https://lpo.energy.gov/?projects=fisker-automotive>; U.S. Dep’t of Energy Loan Programs Office, Projects: Tesla Motors, *available at* <https://lpo.energy.gov/?projects=tesla-motors>

³⁷ Mike Ramsey and Neal E. Boudette, *Fisker Hires Former Chrysler CEO*, WALL ST. J., Feb. 29, 2012.

³⁸ *Id.*

³⁹ U.S. Dep’t of Energy Loan Programs Office, Projects: The Vehicle Production Group LLC, *available at* <https://lpo.energy.gov/?projects=the-vehicle-production-group-llc>

advanced high strength steel (AHSS) used to make component parts for ATVs.⁴⁰ Almost 100 companies have applied for loans through the program; however, an overwhelming majority still await a decision from DOE on the status of their applications.⁴¹

II. The DOE Portfolio of Loan Commitments

DOE committed to issuing 27 loans or loan guarantees under the § 1705 program. These loan commitments total in excess of \$16 billion. At the outset, the ratings agencies rated 23 of these loans as non-investment grade categories, also known as “Junk,” due to their poor credit quality, while the other four were rated BBB, which is at the lowest end of the “investment” grade of categories. Overall, DOE’s 1705 portfolio’s initial unweighted average rating was BB-, which is considered “Junk grade.” According to Fitch, a ‘BB’ rating is speculative and indicates an elevated vulnerability to default risk.⁴² Accordingly a BB- is on the low end of what are considered to be “speculative investments,” barely escaping the classification of “highly speculative” investments.

⁴⁰ Press Release, *Department of Energy Offers Severstal Dearborn, LLC a \$730 Million Conditional Loan Commitment for Michigan Project*, U.S. Dep’t of Energy, July 13, 2011.

⁴¹ Tim Logan, *Loans for Green Car Plants are in Limbo*, Stltoday.com, Mar. 16, 2012, available at http://www.stltoday.com/business/local/loans-for-green-car-plants-are-in-limbo/article_89f33f3c-6ebf-11e1-89a9-0019bb30f31a.html.

⁴² Fitch Ratings, *Definitions of Ratings and Other Forms of Opinion* (2011), available at http://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf

Company	Rating	Parent Rating	Recovery Estimate	Agency	Date of Rating	Date of Loan	Loan Size (Millions)	FIPP or FFB
Solyndra, Inc	BB-		89%	Fitch	8/7/2009	Sept 2009	535	FFB
Beacon Power Corporation	CCC+			S&P	4/30/2010	Aug 2010	43	FFB
Kahuku Wind Power LLC	BB+		85-90%	Fitch	5/26/2010	July 2010	117	FFB
Nevada Geothermal Power Company Inc	BB+		75-80%	Fitch	7/20/2010	Sept 2010	78.8	FIPP
Abound Solar	B		45%	Fitch	11/4/2010	Dec 2010	400	FFB
Caithness Shepherds Flat, LLC	BBB-		90-95%	Fitch	11/12/2010	Oct 2010	1040	FIPP
Abengoa Solar, Inc (Solana)	BB+	BB	80%	Fitch	12/2/2010	Dec 2010	1446	FFB
U.S. Geothermal, Inc (Malheur County, Oregon)	BB		64%	S&P	12/29/2010	Feb 2011	97	FFB
Record Hill Wind, LLC	BB+	AAA		S&P	1/7/2011	Aug 2011	102	FFB
LS Power (Transmission Line project)	BB+		90-95%	Fitch	1/21/2011	Feb 2011	343	FFB
BrightSource Energy, Inc - Ivanpah I	BB+		55%	Fitch	1/25/2011	Apr 2011	1600	FFB
BrightSource Energy, Inc - Ivanpah II	BB		55%	Fitch	1/25/2011	Apr 2011		FFB
BrightSource Energy, Inc - Ivanpah III	BB+		55%	Fitch	1/25/2011	Apr 2011		FFB
NRG Solar, LLC (Agua Caliente)	BB+	B+	90-95%	Fitch	5/13/2011	Aug 2011	967	FFB
SoloPower Inc	CCC+			S&P	7/11/2011	Aug 2011	197	FFB
NextEra Energy Resources, LLC (Genesis Solar)	BBB+	BBB+	84.50%	S&P	7/21/2011	Aug 2010	681.6	FIPP
Cogentrix of Alamosa, LLC	B		44-55%	Fitch	7/22/2011	Sept 2011	90.6	FFB
1366 Technologies Inc	B		65-70%	Fitch	7/25/2011	Sept 2011	150	FFB
Abengoa Solar, Inc (Mojave Solar)	BB	BB	70-75%	Fitch	7/27/2011	Sept 2011	1200	FFB
Granite Reliable Power, LLC	BB	BBB-	75-80%	Fitch	8/10/2011	Sept 2011	135.12	FIPP
Ormat Nevada, Inc	BB			S&P	8/13/2011	Sept 2011	280	FIPP
Exelon (Antelop Valley Solar Ranch)	BBB-	A-	90-95%	Fitch	8/17/2011	Sept 2011	646	FFB
SolarReserve Inc, LLC (Crescent Dunes)	BB		80-85%	Fitch	8/19/2011	Sept 2011	737	FFB
Prologis (Project Amp)	BB	B+	80-90%	Fitch	8/21/2011	Sept 2011	1120	FIPP
Mesquite Solar I, LLC (Sempra Mesquite)	BB+	BBB+	80-85%	Fitch	8/23/2011	Sept 2011	337	FFB
NRG Energy (California Valley Solar Ranch)	BB+	B+	85-90%	Fitch	8/23/2011	Sept 2011	1237	FFB
NextEra Energy Resources, LLC (Desert Sunlight)	BBB-	A-	85-90%	Fitch	8/24/2011	Sept 2011	1199.2	FIPP
Abengoa Bioenergy Biomass of Kansas LLC	CCC	BB	65-70%	Fitch	8/26/2011	Aug 2010	132.4	FFB

Within the range of non-investment grade credit risk, six of the Junk loans were rated at the lower tiers of the range. Specifically, these six projects or loans received ratings within either the “B” or “CCC” categories under the Fitch or Standard and Poor’s classifications.

Despite lending to highly speculative and troubled projects, the government only charged those green energy firms its own cost to borrow money. In other words, the government sought no profit or compensation for credit risk. Given the extent of losses already apparent, the failure to seek any compensation for credit risk inevitably means the taxpayer will lose substantial

funds. This is distinguishable from normal business practices, where banks or investment firms charge a premium or require more upfront capital as a condition for agreeing to finance riskier projects; thus, if the project were to go completely under, the banks would have some capital to show for the losses.

A. DOE's High Risk Loan Portfolio

At an October 2011 press conference, after the collapse of Solyndra, President Obama commented on the 1705 loan portfolio saying that “we knew from the start that the loan guarantee program was going to entail some risk, by definition. If it was a risk-free proposition, then we wouldn’t have to worry about it. But the overall portfolio has been successful.”⁴³ However, the risk conceded by President Obama is larger than he or Secretary Chu have publically acknowledged. Left unsaid is the continuing and mounting risks taxpayers face with each additional disbursement of funds.

As this report reveals, it appears that taxpayer losses associated with Solyndra are just the tip of the iceberg. Clues warning of this risk have been apparent from the inception of the program. This does not bode well for the future of DOE’s loan portfolio. Moreover, most of the energy projects funded under 1705 continue construction or just plan to begin construction. As projects proceed and spend their capital, additional weaknesses will be exposed and more loan recipients will begin to fail.

Secretary Chu has done very little to mitigate these risks. In the first instance, DOE failed to abide by the number one investment rule of thumb – diversify your portfolio. Instead of making investments in a broad range of emerging technologies, DOE sunk 80% of its funds into either solar manufacturing or solar generation projects.⁴⁴ This overemphasis on one type of technology leaves taxpayers vulnerable to changes in the market for solar energy. After Solyndra collapsed, Energy Secretary Steven Chu claimed that “this company and several others got caught in a very, very bad tsunami” and then blamed China and the recession in Europe.⁴⁵ Secretary Chu neglected to mention the extraordinarily clear warning by Fitch Ratings (Fitch) prior to DOE’s commitment. Specifically, Fitch stated:

[C]hanges in business or economic conditions center upon the intermediate and longer term pricing of PV solar panels which are now under extreme competitive pressures. Fitch expects PV pricing pressures throughout the term of the DOE loan and this factor will be the largest challenge facing Solyndra and the largest credit risk incurred in repayment of the Fab 2 loan according to its terms.⁴⁶

As the above excerpt reveals, prior to approving Solyndra, Fitch warned DOE that extreme competition within the solar panel market threatened pricing of solar panels in the coming months and years and that this was the greatest risk to Solyndra’s survival. Even

⁴³ News Conference by the President, The White House (October 6, 2011), *available at*: <http://www.whitehouse.gov/the-press-office/2011/10/06/news-conference-president>.

⁴⁴ U.S. Dep’t of Energy, Loan Program office, Our Projects, *available at* https://lpo.energy.gov/?page_id=45

⁴⁵ Matthew Wald, *Panel Hears Defense of Loan to Solyndra*, N.Y. TIMES, Nov. 17, 2011, *available at*: <http://www.nytimes.com/2011/11/18/business/energy-environment/energy-secretary-defends-solyndra-loan.html>.

⁴⁶ Solyndra rating report letter to Wilbeur Stover, FitchRatings, p.1 (August 7, 2009).

knowing this, DOE chose to invest billions of taxpayer dollars despite the clear warning - 16 of the 27 section 1705-backed projects employed solar technology,⁴⁷ the very technology that experts were warning about. These loans for solar projects totaled more than \$13 billion – more than 80% of the total portfolio. DOE also concentrated its investments in two solar companies in particular, Abengoa and First Solar, to such an extent that financial troubles with either company would affect a significant portion of the loan portfolio. In addition to over investing in solar, the Federal government also permitted “double dipping,” wherein a company received multiple federal grants and loans to cover the cost of a project, thereby reducing the company’s “skin in the game.” DOE also allowed large and financially sound parent entities to undercapitalize their loan guarantee projects, which effectively shifted the risk away from the company to the taxpayer. It appears that for most DOE loan recipients, a low cost loan, in and of itself was insufficient to attract private investors.

In compiling this report, staff considered many troubling issues that deserve attention, yet, because of the magnitude of problems associated with this program, only a share of the concerns could be investigated. Committee staff, therefore, considers this an initial report. The following sections examine the various actions that DOE took while building its financially vulnerable portfolio that jeopardizes billions in taxpayer funds.

B. Major Risk Factors to the Loan Portfolio

1. Falling Natural Gas Prices Hurt Renewable Projects

In addition to the poor credit risk determinations of 1705 recipients, the falling price of natural gas poses a material risk to the sustainability of these renewable energy projects. This section of the report attempts to explain how the market for natural gas has evolved and how it interacts with the market for renewable technologies.

Advances in hydraulic fracturing (“fracking”) technology over recent years dramatically improved domestic natural gas and natural gas liquids production. Over the past few months, in particular, this increase in production resulted in an extraordinary decline in the domestic price of natural gas, substantially widening the efficiency gap between fossil fuels and renewable technologies.⁴⁸ In other words, natural gas has become so cheap that other energy technologies are having difficulty competing, even after federal subsidies.

The high price of oil incentivizes fracking for natural gas liquids, which supply valuable raw materials to oil refiners.⁴⁹ In areas where fracking produces both natural gas and gas liquids, frackers often produce natural gas at a loss, but, in the aggregate, profit due to the high price of gas liquids.⁵⁰ This unique result reduces the responsiveness of natural gas producers to the price

⁴⁷ U.S. Dep’t of Energy, Loan Program office, Our Projects, *available at* https://lpo.energy.gov/?page_id=45

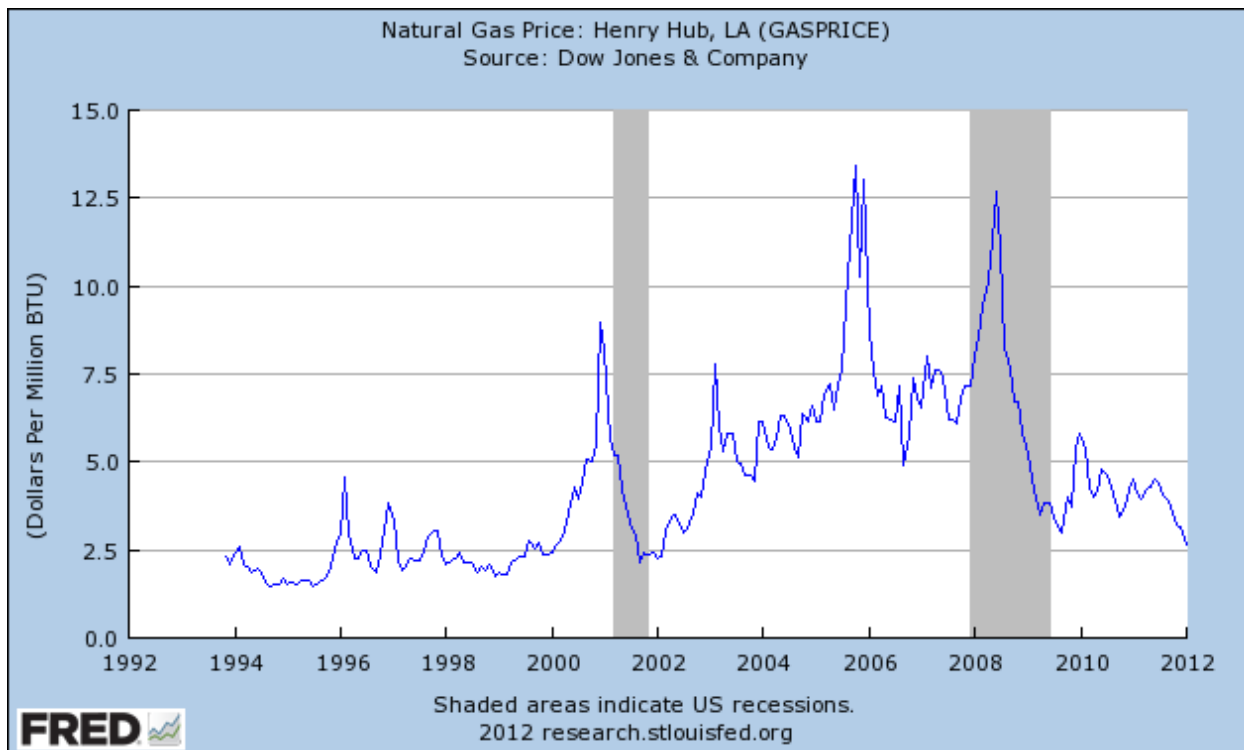
⁴⁸ See U.S. Energy Info. Admin., Monthly Natural Gas Gross Withdrawals, *available at* <http://205.254.135.7/dnav/ng/hist/n9010us2m.htm>.

⁴⁹ See Natural Gas Supply Ass’n, Processing Natural Gas, *available at* http://www.naturalgas.org/naturalgas/processing_ng.asp#seperateng; see also Emanuel V. Ormonde, IHS Inc., Natural Gas Liquids, *available at* <http://chemical.ihs.com/CEH/Public/Reports/229.2500/>

⁵⁰ See Peter Gardett, AOL Energy, A Little Liquid Gas and Oil Goes a Long Way for Energy Producers (Feb. 17, 2012), *available at* <http://energy.aol.com/2012/02/17/a-little-liquid-gas-and-oil-goes-a-long-way-for-energy-producers/>

of natural gas. This ability to continue to profit from the premium price of gas liquids changes the economics of natural gas production enabling a secular decline in natural gas prices.

The resulting low natural gas price reduces the market price for power generation in most areas, as natural gas fired generators usually set the market clearing price. Below is a chart reflecting natural gas prices since 1992.⁵¹ Today's low prices for natural gas have not been seen since the 1990's and, when adjusted for inflation are at historically low levels. While this is good news for consumers of electricity who will benefit from lower rates, this is bad news for the renewable energy industry.



a. Low Natural Gas Prices Reduce Power Purchase Agreement Revenues for Renewable Projects

As natural gas powered generation provides the market clearing price in most regions within the United States, the recent drop in natural gas prices lowered market prices for power. These falling power prices reduce the expected value of anticipated Power Purchase Agreements (PPAs), which are agreements that provide power purchasers, such as utilities and suppliers of energy, such as renewable energy generators, with certainty over future prices. The energy industry relies on PPAs to manage risks associated with the purchase and sale of power. The pricing of PPAs largely depends on expectations with regard to future power prices. The recent

⁵¹ Federal Reserve Bank of St. Louis, Economic Data, Natural Gas Price: Henry Hub, Louisiana, available at <http://research.stlouisfed.org/fred2/series/GASPRICE>

collapse in natural gas prices reduced the potential revenue for PPAs that have not yet been executed.

Lower natural gas prices increase the risks of renewable energy projects that have not yet entered into long term contracts to sell the power they expect to generate because buyers of their product now have cheaper options. Project Amp and other projects that fail to meet benchmarks necessary to maintain a PPA, suffer the risk that they cannot negotiate agreements sufficient to support the cost of the renewables project, even with the benefit of multiple substantial subsidies.

Accordingly, it is reasonable to expect utilities to seek an exit from expensive PPAs whenever the renewable company fails to meet certain benchmarks, whether those benchmarks relate to commercial operation date, insufficient output, reliability or other variables. In other words, given the falling price of power in areas where natural gas is the marginal supplier, it is reasonable to expect revenues from risky renewables projects to be at risk to these falling power prices. If a PPA with a solar producer reflects a price based on markets where \$4.00 per million British thermal unit (MMBtu) of natural gas was prevalent, the utility paying for that solar power might act on any opportunity to renegotiate or exit the unprofitable PPAs now that natural gas prices are below \$3.00. Specifically, as DOE-backed projects come online over the next few years, any failure to meet the production or capacity requirements stated in the PPA may enable the power purchaser to exit or renegotiate the contract, subjecting the renewable project to lower power prices, and thus lower revenues for the company than was predicted at the time DOE negotiated the loan agreement.

In other words, given that power prices have fallen since these projects executed PPAs, there is substantial risk that the power purchasers will find a way out from the PPAs they entered into with the renewable projects. A PPA provides the renewable project security that it will earn a specific amount of revenue. If a party, such as a Utility, that is purchasing power from the renewables project can find a way out of the PPA, this places the revenue of the project at risk. If the renewable projects are forced to renegotiate at current market prices, they will suffer a substantial loss of revenue.

This is particularly concerning in the case of newer technologies, where many of these projects may fail to achieve target operation dates, or may not generate as much power as the contract requires simply as a matter of not having enough experience with the newer technology. Given this risk, many of these projects face the danger of losing the benefit of a higher priced PPA.

One good example comes from the recent reports that First Solar's solar panels are suffering higher failure rates in the desert. This unexpected underperformance will reduce the output of their plants. Such output is a key performance variable considered in the PPA.

b. Low Gas Prices Reduce Demand for Solar Panels

Falling market prices for power as described above impacts all aspects of renewable projects. Despite solar panel prices, the *demand* for solar panels declines as the relative economic benefits of their installation fall. Solar companies currently suffer from excessive competition in panel manufacturing, and also likely face decreasing demand as a result of the competition from cheaper natural gas generation. To the extent low natural gas prices persist,

this represents a sea-change that threatens the viability of all solar manufacturing investment that DOE and Treasury subsidized.

2. DOE's Failure to Diversify

a. DOE Overinvests in Solar Manufacturing despite Ample Warnings

DOE should have averted some of the risks it created in its portfolio by diversifying its investments across renewable energy technologies. DOE's investment in multiple solar manufacturers added to a heated global competition that was already creating an excessive supply of solar panels. These manufacturers were forced to compete both against each other and other solar companies worldwide. As a result, the average selling price per watt for solar panels has continued its decline.

Despite Solyndra's fall, there remains excessive competition in the manufacturing of solar panels. Just this past month, both Abound Solar and First Solar cut solar panel production globally, reflecting this excessive supply and heated competition.⁵² While U.S. solar generation projects can take advantage of falling panel prices to offset a share of the impact of reduced power prices, it appears solar *manufacturers* that suffer both supply and demand shocks can only survive through continued provision of subsidies. Unfortunately for these manufacturers, there is growing evidence that the subsidies are drying up.

With regard to subsidies on a global scale, Germany, the leader in solar subsidies, having invested over \$130 billion to date, is now giving up the habit. According to news reports:

Germany once prided itself on being the “photovoltaic world champion”, doling out generous subsidies—totaling more than \$130 billion, according to research from Germany's Ruhr University—to citizens to invest in solar energy. But now the German government is vowing to cut the subsidies sooner than planned and to phase out support over the next five years. What went wrong?

Using the government's generous subsidies, Germans installed 7.5 gigawatts of photovoltaic capacity last year, more than double what the government had deemed “acceptable.” It is estimated that this increase alone will lead to a \$260 hike in the average consumer's annual power bill.

According to Der Spiegel, even members of Chancellor Angela Merkel's staff are now describing the policy as a massive money pit. Philipp Rösler,

⁵² Cassandra Sweet and Ryan Tracy, *Loan Recipient Abound to Cut Jobs, Retool Colorado Factory*, WALL ST. J., Feb. 29, 2012, available at <http://online.wsj.com/article/BT-CO-20120229-719672.html>; Ehren Goossens, *Solar Suppliers Head for First Demand Drop as Subsidy Cut*, BLOOMBERG NEWS, Mar. 9, 2012, available at <http://www.bloomberg.com/news/2012-03-09/solar-panel-sales-seen-dropping-first-time-in-decade-feeding-glut-energy.html>

Germany's minister of economics and technology, has called the spiraling solar subsidies a "threat to the economy."⁵³

The ratings agencies fully informed the DOE of their expectations for falling panel prices due to excessive global competition. Both Germany and the U.S. appear to be phasing out subsidies over the coming years, and this should eventually help reduce the excessive supply; however, it does so at the expense of the subsidized solar firms. In other words, the apparent cure to the oversupply is the outright shuttering of a large share of solar panel manufacturers worldwide.

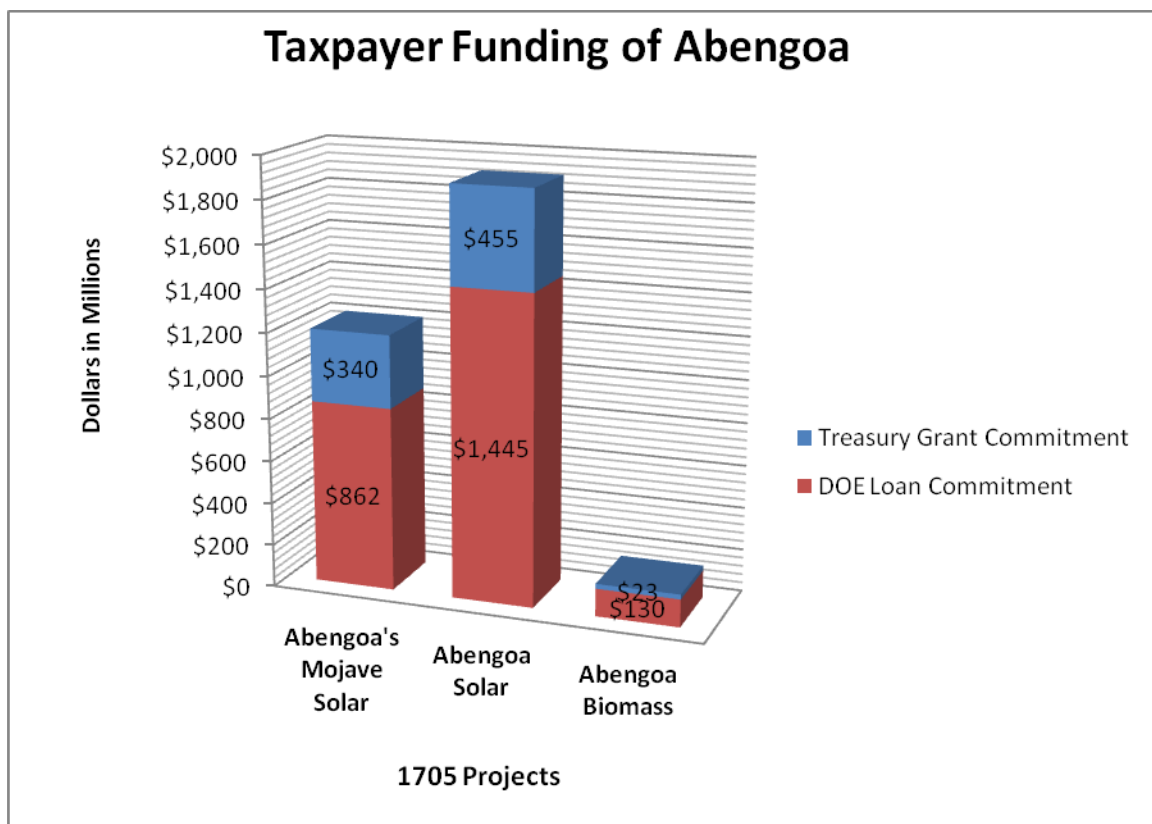
b. DOE Overinvested in Abengoa and First Solar Projects

As DOE failed to diversify the portfolio sufficiently across industries, DOE also failed to diversify across award recipients. A single Spanish firm, Abengoa, received an aggregate \$2.45 billion in loans and loan guarantees plus \$818 million in Treasury cash grants.⁵⁴ This reveals excessive risk and subsidies provided to a single firm via multiple subsidiaries. Abengoa has a credit rating of BB, which is considered Junk, thus making this concentration of investment in one company speculative and highly questionable. Exemplifying the risk DOE took in the case of Abengoa, Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio; Abengoa Bioenergy Biomass of Kansas received an extraordinarily low CCC rating and yet the DOE approved a direct loan to the project.⁵⁵

⁵³ Bjørn Lomborg, *Germany is cutting solar-power subsidies because they are expensive and inefficient*, SLATE, Feb. 18, 2012, available at http://www.slate.com/articles/news_and_politics/project_syndicate/2012/02/why_germany_is_phasing_out_its_solar_power_subsidies_.html

⁵⁴ See FitchRatings credit report for Mojave Solar, LLC, dated July 27, 2011, where DOE committed to an \$862 million loan and Treasury committed to a \$340 million grant; FitchRatings credit report for Abengoa Solar, Inc.'s Solana Generating Station, dated December 2, 2010, where DOE committed to a \$1.445 billion loan guarantee and the Treasury committed to a \$455 million grant; and, FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011, where DOE committed to a \$130 million loan and Treasury committed to a \$23 million grant.

⁵⁵ See FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011.



Abengoa's prospects look dim due to its investments in Europe, particularly Spain, and suffer the risk of declining subsidies as Spain contends with its own declining credit quality and the potential need for a bailout of its own government in the coming months or years. Now that Germany and Spain cut back solar subsidies, this will undoubtedly harm the European renewable investments of Abengoa.⁵⁶ Even if Abengoa investments initially appeared attractive to DOE, overinvestment in this single firm will likely cause substantial harm to the taxpayer. DOE similarly overinvested in First Solar, as we describe in Section III; the taxpayer will undoubtedly suffer losses from that investment as well.

3. DOE Allowed "Double Dipping" – Multiple Subsidies to Single Projects

The junk quality loan portfolio of loan guarantees amassed by DOE reflects funding that substantially exceeds the amounts loaned by DOE. To understand the full extent of funds invested into these renewable firms, all state and federal subsidies need to be considered. For example, most of the 1705 projects benefitted from multiple enormous subsidies, such as grants that covered a third of the cost to build a generation facility, low interest DOE loans, state subsidies, beneficial access to power grids and mandates that require renewable production

⁵⁶ See Ben Sills, *Spain Halts Renewable Subsidies to Curb \$31 Billion of Debts*, BLOOMBERG NEWS, Jan. 27, 2012, available at <http://www.bloomberg.com/news/2012-01-27/spain-suspends-subsidies-for-new-renewable-energy-plants.html>. See also Germany to Axe Solar Panel Installations by More than Half in 2012 (Jan. 19, 2012), available at <http://www.greenworldinvestor.com/2012/01/19/germany-to-axe-solar-panel-installations-by-more-than-half-in-2012/>.

known as renewable portfolio standards. Such mandates result in premium pricing for power generated by renewable technologies.⁵⁷

Even with the benefit of these massive government subsidies, DOE continues to hold a portfolio of “Junk” grade loans and commitments. This defies the natural assumption that layer upon layer of government subsidies, and billions in costless equity should at some point cause an entity to become profitable; however, given the poor quality of the DOE portfolio, this has failed to occur.

4. DOE Allowed Large Energy Companies to Undercapitalize Projects and Shifted Risk to Taxpayers

Even when a company had significant assets to cover a project, DOE put the taxpayer at a greater risk because of the way they structured the guarantee. In four cases among the 27 loan guarantees and Federal Financing Bank (FFB) loans, the parent or project sponsor that sought the benefit of a loan guarantee or FFB loan had a credit rating significantly above that of the project itself. In other words, in four cases, the borrower undercapitalized the project and refused to extend a parental guarantee.

As a result, the taxpayer takes on greater risk, despite the borrowers’ ability to increase funding to the project. The most egregious use of this technique was in the case of Record Hill, LLC, where AAA rated Yale University created a project with a rating of only BB+. The idea that Yale would take a substantial taxpayer subsidy and still seek to protect its remaining assets from the liabilities of Record Hill reflects Yale’s view of the Record Hill project and its disregard for taxpayers. It is inconceivable that any normal bank would take these kinds of risk when loaning money. Banks traditionally insist on a number of provisions to “protect” their investment. Yet DOE and Treasury did just the opposite, and essentially let these companies dictate terms favorable to them and not to the taxpayer. The result is when the company defaults on their obligations, the taxpayer is left with little to no remedy.

3. Systemic Risks from “Crony Capitalism” and Wasteful Spending

There is evidence a number of loan guarantee recipients have engaged in clearly profligate spending. Such wasteful spending threatens the financial viability of the recipient companies, creating risks to both the DOE’s loan commitment portfolio and taxpayer dollars. It is particularly troubling that this waste often takes the form of large cash bonuses to company executives – such payments feed the perception that taxpayer funds are being used to line the pockets of green energy executives.

Beacon Power Corp, the second recipient of a \$ 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010.⁵⁸ Eighteen months

⁵⁷ See M.J. Beck Consulting LLC, Renewable Portfolio Standards, *available at* http://mjbeck.emtoolbox.com/?page=Renewable_Portfolio_Standards (“With few exceptions, utilities are allowed to recover the additional cost of procuring renewable power.”); *see also* Katerina Dobesova, Jay Apt, and Lester B. Lave, *Are Renewable Portfolio Standards Cost-effective Emission Abatement Policy?* (Carnegie Mellon Electricity Industry Center, Working Paper CEIC-04-06), *available at* http://wpweb2.tepper.cmu.edu/ceic/pdfs/CEIC_04_06.pdf.

later, Beacon declared bankruptcy, leaving taxpayers to repay the loan. Adding insult to this injury, these bonuses were explicitly linked to the executives securing the DOE loan guarantee. Similarly, bankruptcy records show Solyndra doled out executive payments just months prior to its late August collapse and early September bankruptcy.⁵⁹ In Solyndra's case, former executives have stated that DOE explicitly allowed federal funds to be used to pay out executive bonuses.

The Department appears to recognize the unacceptability of this crony capitalism. DOE has stated, "We take our role as stewards of taxpayer dollars very seriously, and as such, we will make clear to loan recipients our view that funds should not be directed toward executive bonuses when the rest of the company is facing financial difficulty."⁶⁰ The DOE has not explained why they waited three years into the program to finally take this view, or what – if any – concrete steps they will take to protect taxpayer monies.

Good government groups have severely criticized the DOE's administration of the loan guarantees with respect to executive compensation. Citizens Against Government Waste has stated that "[g]iving a bonus to the executives under these circumstances is rewarding failure with our money with no chance of getting it back. Taxpayers need some representation here. They didn't really get it."⁶¹

Wasteful spending is not limited to executive compensation alone. BrightSource Energy, recipient of a \$1.6 billion loan guarantee to build a solar generation facility, has spent more than \$56 million on a desert tortoise relocation program.⁶² Furthermore, BrightSource will build 50 miles of intricate fencing, at a cost of up to \$50,000 per mile, designed to prevent relocated tortoises from climbing or burrowing back into the solar generation facility.⁶³ BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire \$1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on construction thus far.

The DOE's failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments created a significant moral hazard that has created enormous risks for DOE and taxpayer funds.

C. Harm Posed to Our Economy

The DOE loan guarantee and ATVM loan programs may harm capital formation within the capital markets. As the government makes low cost loans available, private capital cannot compete with the subsidized low interest loans. As a result, many private investors and lenders cease to compete in the same space or may choose to invest in those subsidized firms that anticipate government loans. As intended, government subsidies redirect capital to less efficient

⁵⁸ Ronnie Greene and Matthew Mosk, *Green Firms Get Fed Cash, Gives Execs Bonuses, Fail*, ABC NEWS, Mar. 6, 2012, available at <http://abcnews.go.com/Blotter/green-firms-fed-cash-give-execs-bonuses-fail/story?id=15851653#.T1ZAcnm8hSx>

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² Julie Cart, *Saving desert tortoises is a costly hurdle for solar projects*, L.A. TIMES, Mar. 4, 2012.

⁶³ *Id.*

industries, causing a misallocation of capital. To the extent investors target subsidized firms, those funds that would have sought a more profitable opportunities that would have yielded greater efficiencies and benefits for the economy, instead invest in relatively less profitable industries, where the government subsidy compensates for the lost profit.

To the extent government loans programs proceed, the government must maintain the highest integrity in the allocative process. If government fails to impose a fair and impartial loan process that prioritizes genuinely eligible borrowers, then the government further misallocates capital within the subsidized industry, increasing economic harm. Relatively better businesses may suffer losses while waiting for subsidies that never materialize. Lower quality firms, with strong political ties, may succeed in gaining government support with inferior products, reflecting a multi-factored misallocation of capital.

The failure to maintain integrity and abide by the law when implementing the DOE loan program significantly impacts those that failed to receive subsidies as well. On February 28, 2012, Bright Automotive announced it was shutting down operations. In a poignant and blunt letter to the Secretary, Bright Automotive's management team laid the blame squarely on the unprofessionalism and mismanagement of the DOE loan guarantee program. Bright Automotive described a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses:

Bright Automotive

February 28, 2012

*Secretary Steven Chu
U.S. Department of Energy
Washington, D.C.*

Dear Secretary Chu,

Today Bright Automotive, Inc will withdraw its application for a loan under the ATVM program administered by your department. Bright has not been explicitly rejected by the DOE; rather, we have been forced to say "uncle". As a result, we are winding down our operations.

Last week we received the fourth "near final" Conditional Commitment Letter since September 2010. Each new letter arrived with more onerous terms than the last. The first three were workable for us, but the last was so outlandish that most rational and objective persons would likely conclude that your team was negotiating in bad faith. We hope that as their Secretary, this was not at your urging.

The actions – or better said "lack of action" -- by your team means hundreds of great manufacturing and technical jobs, union and non-union alike, and thousands of indirect jobs in Indiana and Michigan will not see the light of day. It

means our product, the Bright IDEA plug-in hybrid electric commercial vehicle, will not provide the lowest total cost of ownership for our commercial and government fleet customers, saving millions of barrels of oil each year. It means turning your back on a bona fide step forward in our national goal to wean America away from our addiction to foreign oil and its implications on national security and our economic strength.

In good faith we entered the ATVM process, approved under President Bush with bi-partisan Congressional approval, in December of 2008. At that time, our application was deemed "substantially complete." As of today, we have been in the "due diligence" process for more than 1175 days. That is a record for which no one can be proud.

We were told by the DOE in August of 2010 that Bright would get the ATVM loan "within weeks, not months" after we formed a strategic partnership with General Motors as the DOE had urged us to do. We lined up and agreed to private capital commitments exceeding \$200M – a far greater percentage than previous DOE loan applicants. Finally, we signed definitive agreements with state-of-the-art manufacturer AM General that would have employed more than 400 union workers in Indiana in a facility that recently laid-off 350 workers. Each time your team asked for another new requirement, we delivered with speed and excellence.

Then, we waited and waited; staying in this process for as long as we could after repeated, yet unmet promises by government bureaucrats. We continued to play by the rules, even as you and your team were changing those rules constantly – seemingly on a whim.

Because of ATVM's distortion of U.S. private equity markets, the only opportunities for 100 percent private equity markets are abroad. We made it clear we were an American company, with American workers developing advanced, deliverable and clean American technology. We unfortunately did not aggressively pursue an alternative funding path in China as early as we would have liked based on our understanding of where we were in the DOE process. I guess we have only ourselves to blame for having faith in the words and promises of our government officials.

The Chairman of a Fortune 10 company told your former deputy, Jonathan Silver, that this program "lacked integrity"; that is, it did not have a consistent process and rules against which private enterprises could rationally evaluate their chances and intelligently allocate time and resources against that process. There can be no greater failing of government than to not have integrity when dealing with its taxpaying citizens.

It does not give us any solace that we are not alone in the debacle of the ATVM process. ATVM has executed under \$50 million of transactions since October of 2009. Going back to the creation of the program, only about \$8 billion of the

approved \$25 billion has been invested. In the meantime, countless hours, efforts and millions of dollars have been put forth by a multitude of strong entrepreneurial teams and some of the largest players in the industry to advance your articulated goal of advancing the technical strength and clean energy breakthroughs of the American automotive industry. These collective efforts have been in vain as the program failed to finance both large existing companies and younger emerging ones alike.

Our vehicle would have been critical to meet President Obama's stated goal of one million plug-in electric vehicles on the road in 2015 and his commitment to buy 100 percent alternative fueled vehicles for the Federal Fleet. So, we are not the only ones who will be disappointed.

The ineffectiveness of the DOE to execute its program harms commercial enterprise as it not only interfered with the capital markets; it placed American companies at the whim of approval by a group of bureaucrats. Today at your own ARPA-E conference, Fred Smith, the remarkable leader of FedEx, made the compelling case to reduce our dependence on oil; a product whose price is manipulated by a cartel which has caused the greatest wealth transfer in our history from the pockets of working people and businesses to countries, many of whom are not our allies. And yet, having in hand a tremendous tool for progress in this critically strategic battle -- a tool that drew the country's best to your door -- you failed not only in the deployment of funds from ATVM but in dissipating these efforts against not just false hope, but false words. For us, this is a particularly sad day for our employees and their families, as well as the employees and families of our partners. We asked our team members on countless occasions to work literally around the clock whenever yet another new DOE requirement came down the pike, so that we could respond swiftly and accurately. And, we always did.

Sincerely,

*Reuben Munger
CEO*

*Mike Donoughe
COO⁶⁴*

Bright Automotive is not alone in its frustration, as at least three additional companies, U.S. Geothermal, Inc., RenTech, and Tenaska, have suffered substantial harm at the hand of DOE's favoritism and blatant disregard of the law.

U.S. Geothermal, Inc.

U.S. Geothermal, Inc. submitted a DOE loan guarantee application for a geothermal power project in San Emidio, California. Like Bright Auto, U.S. Geothermal received several "clear assurances the DOE considers San Emidio a priority project and that [the] credit review

⁶⁴ Letter, Reuben Munger and Mike Donoughe, Bright Automotive, to the Honorable Steven Chu, Sec'y of Energy, Feb. 28, 2012 (on file with author).

process could be accomplished within the required timeframe.”⁶⁵ Relying on these statements and assurances, U.S. Geothermal took action to advance the project and ensure full readiness and compliance with DOE’s stated requirements. The company incurred numerous expenses, including fees to legal counsel and engineers, as well as resources devoted to the completion of engineer reports and a term sheet.⁶⁶ Most significantly, consistent with a DOE requirement for priority treatment within the 1705 program, U.S. Geothermal executed a 25 year PPA.⁶⁷

U.S. Geothermal has taken every step to ensure that the San Emidio project embodies the “quality” and “readiness” requirements DOE has emphasized. The project, which “would be one of the smaller and more straight-forward transactions,” was ready to enter the credit approval process by May 2011, only to be abruptly notified that DOE decided to suspend work on this loan guarantee.⁶⁸

DOE, in a draft letter to U.S. Geothermal, stated “there are a number of projects that are closer to the conditional commitment stage than yours, and we expect these projects, if they reach financial close, to utilize all of our remaining appropriation.”⁶⁹ In this draft letter, Jonathan Silver further provided that “the decision does not reflect the merits of the project, but rather the timing and funding constraints of the program.”⁷⁰ This claim is dubious at best. As is revealed in Section III of this report, Project AMP failed to meet the eligibility requirement relating to commencement of construction; nonetheless, it received a \$1.4 billion FIPP-based DOE loan guarantee commitment on September 30, 2011. Antelope Valley Solar Ranch failed to meet the “innovativeness” requirement and the “one technology per sponsor rule.” Despite this, Antelope Valley succeeded in gaining a \$646 million FFB direct loan commitment. These two projects consumed an enormous share of DOE’s appropriation yet clearly were not “closer to the conditional commitment stage.”

According to its letter, U.S. Geothermal suffered substantial harm as a result of DOE’s decision to violate the terms of its own program in providing loan commitments to ineligible projects. The company incurred significant expenses in its efforts to meet DOE’s standards and secure the financing it needed to proceed. The greatest harm will result from the PPA U.S. Geothermal entered into in reliance on DOE statements, which now contractually obligates them to provide power for 25 years or suffer penalties.⁷¹ According to U.S. Geothermal’s letter, in the absence of a DOE loan guarantee, the terms of the PPA create a significant obstacle to obtaining commercial financing for their project going forward.⁷²

Rentech

⁶⁵ Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director (May 11, 2011).

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ Draft letter, Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director, to Daniel Kunz, President of U.S. Geothermal (no bates stamp and no date).

⁷⁰ *Id.*

⁷¹ Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep’t of Energy Loan Program Office, Executive Director (May 11, 2011).

⁷² *Id.*

Rentech submitted a proposal for financing for its Northwest Florida Renewable Energy Center Project (NWFREC). Like Bright Automotive and U.S. Geothermal, Rentech had progressed according to plan and adhered to DOE's prescribed schedule. In coordination with DOE staff, Rentech had taken such steps as signing sponsor payment letters, setting up necessary infrastructure, and entering the due diligence process.⁷³

Despite making every effort to fulfill all the requirements DOE laid out, DOE, again, unexpectedly suspended the approval process for the NWFREC Project.⁷⁴ Given the steps Rentech took to ensure all requirements were being fulfilled, DOE seems to have made a decision based on favoritism rather than the law, choosing to fund larger, ineligible projects over a number of more suitable alternatives.

Tenaska

Tenaska sought financing for Imperial Solar Energy Center South (IESC South), a solar power project in Imperial County, California. Like the others, this company also received a letter from DOE suspending the loan approval process, indicating that other projects were closer to the conditional offer stage.⁷⁵ Given the steps Tenaska appears to have taken prior to the suspension, this is unlikely.

Prior to receipt of DOE's letter, Tenaska had been working in coordination with DOE staff and was finalizing the execution of the required term sheet.⁷⁶ Additionally, the company was progressing through the due diligence stage and expected its preliminary Credit Assessment from Fitch in the very near future.⁷⁷ It appears that, once again, DOE suspended the approval of a credible project adhering to all stated standards and working closely with DOE staff, only to later approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE's favoritism significantly harmed yet another company that had relied on the promise of 1705 financing.

The similarity of concerns and claims made by Bright Automotive, U.S. Geothermal, Rentech and Tenaska make clear that DOE actively mislead applicants about the status of their loan applications, thereby encouraging these firms to misallocate capital, which has led to financial harm. When considered in the context of the excessively large loan guarantees provided to Abengoa, First Solar and ProLogis, and the outright violations associated with Antelope Valley and Project AMP, the claims of these companies bring to light the extent of harm that can result when a regulator fails to maintain integrity and allows inappropriate bias and influence to distort its decisions.

To the extent that political connections and lobbying efforts influenced the DOE loan program, this increases the potential harm to our capital markets and our economy. The large

⁷³ Letter, D. Hunt Ramsbottom, Rentech, President & CEO to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 9, 2011).

⁷⁴ *Id.*

⁷⁵ Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 17, 2011).

⁷⁶ *Id.*

⁷⁷ Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director (May 17, 2011).

number of troubling relationships between industry and government officials reflects an environment where fair impartial loan determinations did not occur, resulting in poor decisions.

For example, First Solar gained a unique advantage relative to its peers by mastering its relationship with government as we describe in Section III. Just six months after DOE provided First Solar three loan commitments totaling \$2.4 billion, the Committee learned that DOE's prized achievement under the First Solar scheme, First Solar's Mesa solar panel manufacturing plant, will delay its startup and cut jobs while cutting back global production by 60%. We also learned Abound Solar, a solar panel manufacturer that received a \$400 million DOE loan commitment, has since failed.

Following Solyndra, such a rapid pace of failure for solar projects, including the industry leader First Solar, leads us to expect many more solar projects will follow. As a result of these failures, we should also expect supply disruptions to solar generation projects, breaches of supply contracts, job loss, and dislocation to harm other taxpayer-backed solar firms. Based on these projections, it appears the DOE loan program, in the aggregate, will place a drag on the entire economy as investors in these firms and taxpayers face losses and bankruptcies.

D. The "Independent" Review of the Loan Guarantee Program

In October 2011, the White House ordered that an independent review be conducted by outside consultants in response to emerging problems, uncovered by the Solyndra scandal, with DOE's Loan Guarantee Programs.⁷⁸ The review, led by an "independent consultant," former Obama Administration Assistant Secretary of the Treasury, Herbert Allison, found serious systemic problems related to DOE management and issuance of loan guarantees.⁷⁹ Among the findings, Allison reported that DOE's loan program office suffers from structural weaknesses. The report finds:

- A lack of clarity in the lines of authority within the loan program office;
- A lack of balance between those with governmental experience and those with "substantial private sector experience and skill in project management and finance;"
- A lack of clear guidance regarding DOE's standard of "reasonable prospect of repayment;"
- A lack of clarity with regard to DOE's goals and tradeoffs with respect to financial goals versus policy goals; and
- The fees charged to companies to administer the program are not adequate to last through the duration of the loan guarantees.

While the institutional and managerial recommendations from the independent review are appropriate and helpful, the report falls short because it fails to consider whether political pressure played a role in the decision-making process at DOE. Additionally, the review does not

⁷⁸ THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT'S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf

⁷⁹ *Id.*

provide much insight into taxpayer risks – the independent review looks at “credit subsidy costs,” which represent the net present value of the expected lifetime cost to taxpayers of these loans. Credit subsidy costs, however, do not fully capture the risks to which taxpayers are subjected. According to the non-partisan Congressional Research Service, the independent review “did not calculate expected losses that may be realized by the project portfolio, and the report states that eventual losses cannot be predicted [using the accounting methods adopted by the review].”⁸⁰ In other words, unforeseen risks exist within DOE’s portfolio which may have future budgetary implications but are incalculable using governmental accounting methods.

Furthermore, it has been widely reported that the independent review found the cost to taxpayers of the loan programs to be lower than originally projected. This reading of the report neglects to explain how these calculations came about. The independent review evaluated 30 loans and loan guarantees, broken down into three categories created by the independent consultant: utility-linked loans and loan guarantees (“projects for the generation or transmission of alternative sources of energy”⁸¹); Non-utility-linked loans and loan guarantees (generally, projects that bear greater technological risk; Beacon Power and Solyndra would fall into this category); and Ford and Nissan loans (loans to these two companies were broken out because these “projects are more typical of traditional secured corporate loans”).⁸²

When looked at in the aggregate, the costs of the program have, in fact, decreased since the DOE’s estimates at the time of origination.⁸³ However, this optimistic outlook is driven largely by the third category of loans and loan guarantees – those given to Ford and Nissan. The costs of the first two categories – utility-linked loans and non-utility-linked loans – increased by 14 percent and 71 percent, respectively, while the estimated cost of the Ford and Nissan loans *decreased* by 95 percent. The large drop in the cost of the loan to Ford and Nissan was largely driven by these two companies receiving credit ratings substantially greater than what DOE believed they merited at the time of DOE’s loan origination.⁸⁴ Looking just at utility-linked and non-utility-linked loans and loan guarantees, the expected cost to taxpayers has markedly increased. The Allison report glosses over this pertinent fact.

Lastly, the review excludes costs associated with Beacon Power and Solyndra when it calculated taxpayer liabilities. This is a significant omission, as Beacon Power had drawn down 91 percent of its loan guarantee at a cost to taxpayers of \$39 million, while Solyndra had drawn

⁸⁰ Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

⁸¹ THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT’S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf

⁸² Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

⁸³ THE WHITE HOUSE, REPORT OF THE INDEPENDENT CONSULTANT’S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), *available at* http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf

⁸⁴ Phillip Brown, James Bickley, Bill Canis, “Consultant Review of DOE’s Loan and Loan Guarantee Portfolio: Summary and Analysis of Key Findings and Recommendations,” Congressional Research Service, Memorandum, March 8, 2012.

down 98 percent, or \$527 million. This is \$566 million in costs to taxpayers from the loan guarantee program that are completely ignored by the independent review.

III. DOE Violated Statutory, Regulatory, and Prudential Requirements

The Committee investigation and analysis reveals that, among many other concerns, DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. In some cases it appears the bias may stem from DOE's susceptibility to effective lobbying efforts, conflicts of interest present in the Administration, or from its overriding policy preference for renewable technology.⁸⁵ The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration. .

A. DOE Repeatedly Violated Requirements Intended to Ensure Innovation and Manage Risk

1. Regulatory Requirements

The Energy Policy Act specifies that the Secretary may *only* make loan guarantees under §1703 for projects that employ "new or significantly improved technologies."⁸⁶ DOE's implementing regulation defines this as an energy technology "that is not a Commercial Technology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important improvements in productivity and value, in comparison to Commercial Technologies in use in the United States. . . ."⁸⁷ In applying this definition, it is important to bear in mind the congressional intent underlying title XVII: to incentivize *innovative* technologies.⁸⁸

The Loan Program Office's (LPO) first solicitation, issued on July 29, 2009, targeted innovative projects that satisfied the statutory and regulatory requirements of §1703.⁸⁹ Projects approved under this solicitation could access 100% financing through the Federal Financing Bank.

The LPO's second solicitation, issued on October 7, 2009, created the Financial Institution Partnership Program (FIPP) under § 1705.⁹⁰ This loan guarantee solicitation was

⁸⁵ An example of evidence indicating a strong ideology: Jonathan Silver, the former Director of the Loan Program Office (LPO) stated in an email to Matthew Winters dated June 9, 2011, in relation to a Treasury review of First Solar cost estimates, "Well done. Sorry you have to deal with all this. Hope the real story of how those folks tried to kill deals that would have moved the needle and created jobs because of a slavish attachment to a flawed and limited world view comes out."

⁸⁶ 42 U.S.C. § 16513(a)(2).

⁸⁷ 10 C.F.R. § 609.2 (2011).

⁸⁸ Energy Policy Act of 2005, Pub. L. 109-58, title XVII, 119 Stat. 1117 (2005).

⁸⁹ Innovative Solicitation, *supra* note 14.

⁹⁰ FIPP Solicitation, *supra* note 23.

open to *non-innovative* (i.e., already commercialized) projects, but the project sponsor had to secure the loan itself from a private lender. This structure reflects a reasonable and prudent application of the Department's loan guarantee authority: a project that employs commercialized technology would only need a federal loan guarantee if it was an inherently high-risk venture. The Department prudently sought to mitigate this risk by requiring that it be shared with a private financial institution.

A second requirement in the Code of Federal Regulations only allows for "one technology per project sponsor."⁹¹ Section 609.3(a) states that a Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. This common-sense requirement mitigates the risk to taxpayer dollars by ensuring diversity, while increasing the potential for innovation within the Department's loan guarantee portfolio.

Nonetheless, in issuing these loans, DOE disregarded these constraints, often with the explicit encouragement of department officials. Substantial evidence indicates that, in two cases, officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar.⁹² In other cases, DOE labeled a technology as "innovative" when it clearly should have been classified as a "proven technology" merely because the particular model had not been sold in the United States.⁹³ Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudential requirements.

2. The First Solar Scheme

a. Overview

First Solar manufactures thin film cadmium telluride solar panels and also provides prefabricated solar plants, where buyers can purchase a ready to run solar generation facility that uses First Solar's cadmium telluride panels.⁹⁴ First Solar sought to create four turnkey projects with the assistance of DOE loan guarantees and direct loans. Contrary to the law governing DOE loans, these four projects relied on virtually identical solar technology. Accordingly, First Solar's use of the same technology across the four projects resulted in potential violations of federal regulations and the underlying loan solicitations. Specifically, through DOE's funding of three First Solar projects, DOE and First Solar may have violated regulations imposing the innovativeness requirement⁹⁵ and violated the regulation that allows only one technology per project sponsor.⁹⁶

⁹¹ 10 C.F.R. § 609.3(a) (2011).

⁹² See discussion *infra* Part III.A.2.

⁹³ See discussion *infra* Part III.A.2.e.

⁹⁴ See First Solar, Product and Services, *available at* <http://www.firstsolar.com/Products-and-Services/Products>

⁹⁵ The Energy Policy Act specifies that the Secretary may *only* make loan guarantees under §1703 for projects that employ "new or significantly improved technologies." 42 U.S.C. § 16513(a)(2). DOE's implementing regulation defines this as an energy technology "that is not a Commercial Technology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important

First Solar submitted applications for two of the projects, Topaz and Desert Sunlight, under the DOE's FIPP solicitation that allowed for non-innovative projects. The other two projects, Agua Caliente and Antelope Valley Solar Ranch, sought and succeeded in gaining an advanced position in the application process by purchasing existing projects from Nextlight Renewable Power ("Nextlight") that previously filed applications with DOE. However, the projects purchased from Nextlight had applied under the DOE's "innovative" solicitation.

First Solar always intended to use the same technology across all four projects. However, given the innovativeness requirement that applied to Agua Caliente and Antelope Valley Solar Ranch, as a result of Nextlight's original applications, these projects still needed to be deemed innovative. Additionally, the two projects needed to comply with the one technology per project sponsor requirement. This latter requirement meant that the two "innovative" projects also needed to be differentiated from each other to qualify.

First Solar's Agua Caliente and Antelope Valley Solar Ranch received funding despite the fact that each project may have violated the regulations described above. In the next section, we describe these violations in greater detail, provide the motives of DOE and the Administration, and offer documentation indicating DOE manufactured evidence of compliance with these rules while internally conceding their failure to adhere to the law.

b. The Manufacturing Plant that Motivated Action on All Four First Solar Projects

While DOE publicly talked about the merits of each First Solar project individually, internal DOE emails indicate that DOE favored First Solar projects and viewed them collectively because DOE sought to enable First Solar to build a new manufacturing plant in Arizona.⁹⁷ The logic was simple: four solar generation projects would provide sufficient demand to justify and support locating a new First Solar manufacturing plant in Arizona.⁹⁸

The White House planned to use this new manufacturing plant and the jobs that it supported as evidence of the indirect benefits of DOE loan guarantees for the economy. Documents and e-mails obtained by the Committee offer unique insight on how decisions were made. In an e-mail from Jonathan Silver, Executive Director of the Loan Programs Office at DOE, to Deputy Energy Secretary Daniel Poneman in May of 2011 demonstrates DOE's plan to group the First Solar deals as a package. Silver wrote that "First [S]olar deals need to be considered as a package since they support the building of a manufacturing plant to service their collective needs."⁹⁹ The White House supported this packaging idea. In an email to other DOE officials from June 2011, Matthew Winters, Senior Advisor for Loan Programs at DOE, wrote:

We have often talked about how the 3 FSLR [First Solar] projects were are (sic) considering will support the building of a manufacturing facility in Arizona. Can

improvements in productivity and value, in comparison to Commercial Technologies in use in the United States..." See 10 C.F.R. § 609.2 (2011).

⁹⁶ Section 609.3(a) states "[a] Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. See 10 C.F.R. § 609.3(a) (2011).

⁹⁷ Email from Jonathan Silver, DOE, May 31, 2011 (on file with author)

⁹⁸ *Id.*

⁹⁹ *Id.*

one you (sic) please quickly draft a 1-2 sentence blurb that states exactly how this is the case, and give the location, size, and expected construction date of the mfg facility? *This will go into a document for the White House that describes the manufacturing impact of the projects in our pipeline.*¹⁰⁰ (emphasis added)

c. The Collective Application of First Solar

The DOE's treatment of the First Solar applications during the credit review process demonstrates the Department realized the projects all employed the same non-innovative technology. DOE considered packaging three First Solar projects as one vote in front of the DOE credit review board (the Antelope Valley, Topaz, and Desert Sunlight projects), despite the projects coming from different solicitations (innovative versus commercial). Margot Anderson, a Senior Advisor at DOE, wrote an email on June 25, 2011, before the DOE credit review board voted to grant conditional guarantees to three First Solar projects (Antelope Valley, Topaz, and Desert Sunlight), asking "[S]hould it be three separate votes or one vote for all three projects?"¹⁰¹ While the credit review board appears to have voted separately for all three projects, this conversation reinforces the mindset within DOE that all First Solar projects represented a package and not individual projects.

Despite ultimately approving credit individually for each project, the next email shows the extent to which DOE wanted "all of the deals to look exactly alike":

Our question is simply "is there an issue if we bring all of the First solar projects including the various IEs (Luminate and Burns and Roe) into the same room to discuss the terms of the deals?" Essentially, we want all of the deals to look exactly alike. First Solar has suggested the meeting so they are on board the IEs are OK with it but one brought up the [Non-Disclosure Agreement] issue and I want to get that resolved. Jonathan want[s] the meeting to happen this week or early next, to get these projects going.¹⁰²

With this plan to package the First Solar deals, DOE granted conditional loan guarantees to four First Solar projects that used First Solar's cadmium telluride photovoltaic solar panels.¹⁰³ DOE describes this technology as "commercially proven" and "deployed since 2001."¹⁰⁴ Yet, DOE was classified two of First Solar's projects as innovative and ignored the "one sponsor per technology per solicitation."¹⁰⁵

¹⁰⁰ Email from Matthew Winters, DOE, June 14, 2011. (Emphasis added).

¹⁰¹ Email from Margot Anderson, DOE, June 25, 2011.

¹⁰² Email from Jeffrey Walker, DOE, to Susan Richardson and Kimberly Heimert, DOE, Subject "Bridge [Non Disclosure Agreements] for this unusual circumstances," (March 29, 2011, 8:21 AM).

¹⁰³ DOE did not finalize First Solar's Topaz project and only gave final approval to three First Solar projects. Upon finalization of its DOE loan guarantees, First Solar sold all of its development projects to large utilities, such as Exelon and NextEra.

¹⁰⁴ "Energy Department Finalizes Loan Guarantee to Support California Solar Generation Project," U.S. Department of Energy, September 30, 2011. Available at: <https://lpo.energy.gov/?p=5324>.

¹⁰⁵ This scheme coincidentally improved the financing terms of the programs by enabling the government to provide a 100% direct loan as opposed to an 80% loan guarantee. Specifically, those entities approved under the innovative path received direct federal loans from the Federal Financing Bank (FFB) for 100% of the sought after amount. Had these entities gone through the commercial path, they would need to borrow from a private lender who would then

d. First Solar's Acquisition of NextLight's Projects to Enable All Four Projects to Proceed Together

To understand why DOE manipulated the First Solar applications one must understand how these projects came to pass. First Solar purchased NextLight Renewable Power in a deal that included NextLight's two pending DOE loan guarantee projects—Agua Caliente and Antelope Valley Solar Ranch—in April of 2010.¹⁰⁶ DOE had invited both NextLight projects into the due diligence level in the loan application process,¹⁰⁷ indicating that both continued to progress successfully towards ultimate approval. NextLight had applied for innovative loan guarantees for both projects. Under Nextlight's applications, the Agua Caliente project would use amorphous silicon technology, and the Antelope Valley project would use crystalline silicon solar technology.¹⁰⁸

When First Solar purchased NextLight, it planned to switch to its own proven – and non-innovative - technology relying on cadmium telluride panels for both projects. However, First Solar wanted to keep both projects in the innovative technology queue. First Solar faced two challenges to keep both projects in the innovative queue. First, the company had to prove that both projects used innovative technology; while using First Solar cadmium telluride panels for the projects that would not qualify as innovative. Second, First Solar had to ensure that both projects used different “innovative” technologies, otherwise the projects would violate the DOE rule that one company could only sponsor one project using a specific innovative technology under the innovative technology solicitation.

e. Failure to Prove Innovativeness; Resorting to Falsification

First Solar planned to qualify both projects for the innovative solicitation by incorporating relatively minor new technologies into the solar plants. The Agua Caliente project would use standard First Solar cadmium telluride panels, but would use an inverter “fault ride-through and dynamic voltage regulation” technology¹⁰⁹ that would help the plant stay operational even if the sun did not shine constantly on a particular day.¹¹⁰ First Solar relied on this inverter

receive at most an 80% guarantee. Therefore, the non-innovative entities benefitted from the false “innovative” designation in that they received fully guaranteed funding, as opposed to partially guaranteed, reducing their cost of borrowing. The other two First Solar projects received partial loan guarantees as part of the Financial Institution Partnership Program.

¹⁰⁶ Dealbook, *First Solar Buys NextLight for \$285 Million*, N.Y. TIMES, April 29, 2010 available at <http://dealbook.nytimes.com/2010/04/29/first-solar-buys-nextlight-for-285-million/>.

¹⁰⁷ Email from Daniel Tobin, Director of Loan Programs Intake Division and Senior Investment Officer, U.S. Dep't of Energy (July 23, 2010).

¹⁰⁸ Internal Memo from Dong Kim, Chief Engineer of the Technical and Project Management Division, U.S. Dep't of Energy, to David Frantz, Director of Loan Guarantee Program Office, U.S. Dep't of Energy (July 25, 2010).

¹⁰⁹ Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a \$967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at <http://energy.gov/articles/departments-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project>.

¹¹⁰ U.S. Dep't of Energy, Internal Memo, “Next Light Antelope Valley Technical Eligibility Re-Evaluation” (July 21, 2010); See also email from Cathy Grover, Luminate, to Robin L Sampson, U.S. Dep't of Energy (Mar. 30, 2011, 3:39 PM EST), which stated, “The Project's inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values.”

to qualify the Agua Caliente project as innovative.¹¹¹ However, the innovativeness of this inverter technology is highly questionable based on the following issues identified through the review of email communications and internal DOE reports.

An email between DOE staff describes the lack of innovativeness of this inverter technology, stating, “The Project’s inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values.”¹¹² A DOE whitepaper reveals that more than 200 of these allegedly “innovative” inverters had been in use in Germany, Italy and Spain since September 2010.¹¹³ While, according to the rule, foreign commercial use of a technology is not a bar to deeming domestic use innovative, the broad commercial use in Europe reflects the disrespect DOE applies to the actual innovativeness requirement.

Directly calling into question any determination that this technology is innovative, the DOE whitepaper provides that these inverters are “commercially ship[ped] today in the United States as well.”¹¹⁴ The report explains that “the technology being implemented is not new as compared to traditional turbine-based generators” and is commercially manufactured in Colorado.¹¹⁵ These facts emailed among DOE staff undermine any determination of innovativeness and clearly indicate that Agua Caliente failed to satisfy the requirements designed to spur development of new technologies.¹¹⁶

First Solar also planned to use this inverter technology to make the Antelope Valley project innovative; however, even if the technology were innovative with regard to Agua Caliente, its second application to Antelope Valley would violate the one technology per project sponsor requirement.¹¹⁷ To overcome this obstacle, First Solar added a “single axis tracking” system for the Antelope Valley project to differentiate it.¹¹⁸ This system simply allowed the panels to track the sun – a technology that has been around for decades. Additionally, First Solar

¹¹¹ See “NEXT LIGHT ANTELOPE VALLEY TECHNICAL ELIGIBILITY RE-EVALUATION” attachment (July 21, 2010) to email from Sarah Hetznecker, U.S. Dep’t of Energy, to Patrick Gorman, U.S. Dep’t of Energy, Subject: “here is the antelope valley re-evaluation memo” (July 22, 2010 9:06 AM).

The Antelope Valley Project will use the new Fault Ride-Through Technology inverters that are being used in the Agua Caliente Project and were the basis for new and significantly improved technologies as compared to commercial technologies’ for that project. While this is being used on both of these projects, it will meet the definition of “new of [sic] Singificantly Improved Technology and it is not a Commercial Technology, because it is not being used in three or more commercial projects in the US in the same general application and it has not been in operation for 5 years. In addition, First Solar will use single axis tracking on 50 MW of the 230 MW for the Antelope Valley Project. Based up on the re-evaluation, we conclude that the project will meet the eligibility criteria

¹¹² Email from Cathy Grover, Luminate, to Robin Sampson, U.S. Dep’t of Energy (March 30, 2011, 3:39 PM).

¹¹³ “Antelope Valley Solar Ranch 1 Project: Inverter Implementation Whitepaper” (May 18, 2011) (Email from Sarah Hetznecker to Jeffrey Walker (May 22, 2011, 12:14:03 PM)).

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ See *supra* note 87.

¹¹⁷ See *supra* note 91.

¹¹⁸ Dong Kim, U.S. Dep’t of Energy Memo, “First Solar (Next Light) Antelope Valley Solar Ranch One Technical Eligibility Re-Evaluation”(Aug. 4, 2010).

only planned to install this system on 50 MW of the plant's 230 MW capabilities, less than 25% of the plant.¹¹⁹

Rather than force First Solar's Antelope Valley project to step out of the innovation queue, DOE quickly created a memo that allegedly justified the project remaining "innovative." The memo claimed that the Antelope Valley project would use three different innovative technologies: Fault Ride-Through Technology, Dynamic Voltage Regulation, and single axis tracking.¹²⁰ Internal DOE emails reveal a rushed process that left certain DOE officials questioning the validity of the analysis.¹²¹ DOE officials also heavily edited the memo to deemphasize First Solar's other pending projects and the fact that the Antelope Valley project used the same "innovative" technology as the Agua Caliente project.¹²²

More importantly, on June 23, 2011, Dong Kim, Director of the Technical and Project Management Division, (who had edited the DOE memo on Antelope Valley's innovativeness referenced above) wrote an email indicating that the allegedly innovative tracking technology did not constitute innovativeness, was not considered innovative originally, and also pointed out that others continuously revised documents to incorrectly reflect that the trackers were "innovative." Kim wrote:

Someone keeps changing [Antelope Valley Solar Ranch] Technical slides to include single axis trackers as an innovation. Be clear that this not an innovation. The record will show that we did not grade this as innovative during intake review. It will not stand up to scrutiny if compared with CVSR [California Valley Solar Ranch] trackers. Whoever continues to make this change needs to understand that Technical does not support the 20 percent of the CVSR field with trackers as an innovative component.¹²³ (emphasis added)

The apparent cover-up that led to Kim's stern email indicates that DOE staff sought to maintain a false finding of "innovative" for the single axis trackers.

DOE's August 4, 2010, memo claimed that the Antelope Valley project used three innovative technologies. However, DOE's Director of the Technical and Project Management Division revealed that the single axis trackers did not qualify as innovative and DOE's own press release demonstrated that the Agua Caliente project already used both the fault ride-through and the dynamic voltage regulation technologies.¹²⁴ Since Agua Caliente had already received a loan guarantee using this "innovative" technology, Antelope Valley was barred from relying on the same technology for its innovativeness-based application. As a result, Antelope Valley provided

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Email from Susan Grodin, U.S. Dep't of Energy (Aug. 3, 2010) (stating that "this memo was cobbled together from different sources and in so doing, an obvious piece was left out").

¹²² Dong Kim, U.S. Dep't of Energy, Technical memo (July 25, 2010) (discussing that DOE's tracked changes on the memo reveal that DOE removed references to First Solar's Desert Sun and Topaz projects from the second paragraph and removed an entire paragraph discussing how the Antelope Valley project and the Agua Caliente project use the same Fault Ride Through Technology).

¹²³ Email from Dong Kim, U.S. Dep't of Energy (June 23, 2011).

¹²⁴ Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a \$967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at <http://energy.gov/articles/department-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project>.

no innovative technology that would justify its eligibility for a DOE loan. DOE should have deemed First Solar's Antelope Valley project ineligible under the innovativeness solicitation.

f. Persistent Pressure to Approve the First Solar Projects and Achieve the Master Plan of Building a Manufacturing Facility

First Solar kept pressure on DOE to approve the three projects in the final weeks leading up to DOE's issuance of conditional loan guarantees. On May 18, 2011, Jens Meyerhoff, an executive at First Solar, wrote a letter to Jonathan Silver implicitly threatening that First Solar might not commit to completing construction on the Arizona manufacturing plant if DOE did not approve all three First Solar loan guarantees. Meyerhoff wrote:

A failure to receive DOE and U.S. government agency approvals for these projects or missing the September 30 statutory deadline under the 1705 program would seriously jeopardize the financing for the Agua Caliente, Antelope Valley Solar Ranch, Desert Sunlight and Topaz projects. As you know, a major reason for choosing to build the manufacturing plant in Mesa, AZ was to provide solar modules to these large and important U.S. projects.

We will invest more than \$300 million in the factory, put people in Mesa to work at a long-dormant industrial site that once was home to an automotive testing facility, and create high tech green jobs that did not exist before...

...First Solar consciously made the decision to build a new U.S. manufacturing center to support and recycle economic benefits created by favorable U.S. political support for renewable energy, including the 1703 and 1705 DOE loan guarantee programs.

The DOE loan programs provide an important financing 'bridge' at a time when the U.S. private debt markets have little or no experience financing first-of-their-kind utility-scale solar projects, and the capital markets remain constrained in the wake of the global financial crisis. If First Solar's project applications are not approved, or if they're delayed beyond September 30, we believe it could jeopardize our ability to close financing (both debt and equity), jeopardize construction of 1,620 megawatts of solar capacity and, **frankly, undermine the rationale for a new manufacturing center in Arizona.**¹²⁵

First Solar also tried more friendly persuasion. Nikolas Novograd, Vice President at First Solar, sent Bill Pegues at DOE a picture of the construction taking place at First Solar's Arizona plant. Pegues planned to use the construction picture to help persuade members of the credit review board to vote for the First Solar projects. He forwarded the picture to several DOE officials, commenting, "[H]ere's a photo of the construction

¹²⁵ Letter from Jens Meyerhoff, First Solar, to Jonathan Silver, Director of Loan Programs Office, U.S. Dep't of Energy (May 18, 2011) (*emphasis added*).

progress on the FSLR mfg plant in Mesa, Arizona as of Tuesday 6/14. I'll bring several copies to CRB [Credit Review Board] just in case we need them.”¹²⁶ Additionally, Rob Gillette, CEO of First Solar, arranged a phone call with the Deputy Energy Secretary on June 24, 2011, only days before the Credit Review Board met to decide whether to grant conditional loan guarantees to the three First Solar projects.¹²⁷

By June 22, 2011, several days before the Credit Review Board approved conditional loan guarantees for the projects, Secretary Chu's office had already planned a press release to announce the conditional loan guarantees for the First Solar projects that relied upon job creation numbers from First Solar itself.¹²⁸ Secretary Chu's office carefully coordinated the media strategy for the approval of the conditional loan guarantees for the three First Solar projects. Sonia Taylor at DOE wrote in an email on June 28, 2011, that

S1's office hopes to offer an advanced story to a national reporter on all three First Solar deals later today, with a story to run tomorrow along with the press release...

...If you haven't already, can you all please notify the appropriate people from First Solar and the other companies that the deal is official? I have been working with First Solar (**under the guise of 'should the deal be approved'**), and they do not plan on writing a press release. Can you all please see whether the banks plan on issuing a release? If so, we'll need to review it.¹²⁹ (emphasis added)

On June 30, 2011, DOE issued a press release that announced the conditional loan guarantees for the three First Solar projects for around \$4.5 billion.¹³⁰ The six paragraph announcement only mentioned First Solar once and described the Antelope Valley project as featuring “a utility-scale deployment of innovative inverters with voltage regulation and monitoring technologies that are new to the U.S. market.”¹³¹ The press release did not mention the trackers on the Antelope Valley project.

DOE would eventually issue final loan guarantee offers to First Solar's Antelope Valley and Desert Sunlight projects on the final day of the 1705 loan guarantee program (September 30, 2011).¹³² Despite the issues surrounding the innovative nature of the Antelope Valley project, DOE finalized a 100% loan guarantee worth \$646 million for the allegedly “innovative” project. Ultimately, DOE did not finalize First Solar's Topaz

¹²⁶ Email from Bill Pegues, U.S. Dep't of Energy (June 23, 2011).

¹²⁷ Email from Elizabeth Emanuel, U.S. Dep't of Energy (June 24, 2011).

¹²⁸ Email from William Pegues, U.S. Dep't of Energy (June 22, 2011).

¹²⁹ Email from Sonia Taylor, U.S. Dep't of Energy (June 28, 2011).

¹³⁰ Press Release, U.S. Department of Energy, DOE Offers Conditional Loan Guarantee to Support Nearly \$4.5 Billion in Loans for Three California Photovoltaic Solar Power Plants (June 30, 2011) *available at* <https://lpo.energy.gov/?p=4873>.

¹³¹ *Id.*

¹³² DOE did not finalize First Solar's Topaz loan guarantee project.

project, but a subsidiary company of Warren Buffett's Berkshire Hathaway purchased the project from First Solar.¹³³

g. First Solar's Financial Problems since the Loan Guarantees

Since DOE finalized First Solar's three loan guarantees (for over \$3 billion), First Solar has encountered serious financial problems that put the DOE funded projects in jeopardy. First Solar's stock declined the greatest compared to of any S&P 500 companies in 2011 and has lost over \$100 per share over the past year.¹³⁴ First Solar has cut production of its solar panels worldwide.¹³⁵ Based upon the company's financial troubles, First Solar fired its CEO in October.¹³⁶ Additionally, in March 2012, the Securities and Exchange Commission announced an investigation into whether First Solar had improperly disclosed information about whether the First Solar Topaz project would receive a loan guarantee from DOE.¹³⁷

More recently, First Solar has revealed problems that directly impact its three DOE loan guarantee projects. First Solar's Antelope Valley project had problems getting a permit and has yet to receive any DOE funding.¹³⁸ First Solar announced in late February that it would postpone manufacturing solar panels at its Mesa Arizona plant, which is still under construction, because of financial problems.¹³⁹ First Solar intended for the Mesa facility to provide panels to the four First Solar projects. This delay means that the indirect jobs that the White House wanted to create with the three loan guarantees will likely never materialize, and raises questions about whether First Solar will have problems supplying solar panels to its DOE loan guarantee projects. Additionally, First Solar has revealed that it has needed to replace millions of dollars worth of its solar panels under warranty because they did not last in hot climates.¹⁴⁰ Considering all three of First Solar's DOE-based solar generation projects are located in hot desert climates, this issue raises serious concerns about whether the panels will work properly long term.

h. Conclusion

There appears to be a significant amount of evidence, based on documents received by the Committee and supplied by DOE and others, indicating that DOE manipulated its analysis and strategically modified evaluations in order to issue loans to First Solar that would qualify

¹³³ Todd White and Marc Roca, *Berkshire Buys \$2 Billion Power Projects as Buffett Wagers on Solar Energy*, BLOOMBERG, December 7, 2011 available at <http://www.bloomberg.com/news/2011-12-07/berkshire-s-midamerican-energy-to-buy-topaz-solar-farm.html>.

¹³⁴ "First Solar (FSLR) Worst Stock in S&P 500 This Year," StreetInsider, December 30, 2011 available at [http://www.streetinsider.com/Insiders+Blog/First+Solar+\(FSLR\)+Worst+Stock+in+S%26P+500+This+Year/7046826.html](http://www.streetinsider.com/Insiders+Blog/First+Solar+(FSLR)+Worst+Stock+in+S%26P+500+This+Year/7046826.html).

¹³⁵ Patrick O'Grady, *First Solar delays Mesa production plant*, PHOENIX BUS. J., February 29, 2012 available at http://www.bizjournals.com/phoenix/morning_call/2012/02/first-solar-delay-mesa-production-plant.html.

¹³⁶ *First Solar Ousts CEO, Shares Dive 24 Percent*, REUTERS, October 25, 2011 available at http://www.cnbc.com/id/45035458/First_Solar_Ousts_CEO_Shares_Dive_24_Percent.

¹³⁷ Patrick O'Grady, *SEC investigating First Solar*, PHOENIX BUS. J., March 4, 2012 available at http://www.bizjournals.com/phoenix/morning_call/2012/03/sec-investigating-first-sola.html.

¹³⁸ Yuliya Chernova and Cassandra Sweet, *California Solar Deal Hits a Snag*, WALL ST. J., February 11, 2012 available at <http://online.wsj.com/article/SB10001424052970203646004577214973345400202.html>.

¹³⁹ O'Grady, *supra* note 132.

¹⁴⁰ Ryan Randazzo, "First Solar replacing more solar panels," The Arizona Republic, March 1, 2012 available at <http://www.azcentral.com/arizonarepublic/business/articles/2012/03/01/20120301first-solar-replacing-more-solar-panels.html>.

under the statutory guidelines. This is cause for serious concern. An application that should otherwise fail, but instead passes under improper influence and through the manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets.¹⁴¹ Furthermore, any advantage to an applicant disadvantages other applicants and improperly diverts DOE resources.

B. DOE Violated the Statutory Requirement that Projects Commence Construction by September 30, 2011

The Recovery Act states that the Secretary may only make loan guarantees under § 1705 for projects “that commence construction not later than September 30, 2011.”¹⁴² This provision is designed to effectuate the *rapid* deployment of renewable energy projects. Furthermore, § 3(b) of the Act mandates that the Secretary expend appropriated funds “as quickly as possible consistent with prudent management,” so as to achieve the Act’s stated goal of economic stimulus.¹⁴³ This “shovel-ready” requirement also helps to mitigate risks associated with too many unknown variables.

The DOE knowingly violated this explicit statutory mandate. The Department’s FIPP loan guarantee solicitation from October 7, 2009, defined “commence construction on before September 30, 2011” to mean that

(i) the Borrower has completed all pre-construction engineering and design, has received all necessary licenses, permits and local and national environmental clearances, has engaged all contractors and ordered all essential equipment and supplies as, in each case, can reasonably be considered necessary so that physical construction of the Eligible Project may begin (or, if previously interrupted or suspended, resume) and proceed to completion without foreseeable interruption of material duration and (ii) such physical construction (including, at a minimum, excavation for foundations or the installation or erection of improvements) at the primary site of the Eligible Project has begun (or resumed).

On September 30, 2011 – the last day of the program – the Secretary approved a \$1.4 billion loan guarantee for Project AMP. Project AMP intends to install solar panels on the rooftops of many of ProLogis’ extensive real estate holdings. However, as the September 2011 application approval deadline approached, Project AMP was nowhere near prepared to commence construction, in part because it failed to secure contractual commitments to purchase energy from its proposed solar generation facilities.¹⁴⁴ Construction cannot begin for any phase of Project AMP until parties agree to a Power Purchase Agreement (PPA), which helps to ensure sufficient revenue to justify an installation of solar panels. As of March 6, 2012, Project AMP

¹⁴¹ See discussion *infra* Part V.A. and V.B.

¹⁴² 42 U.S.C. § 16516(a).

¹⁴³ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

¹⁴⁴ Email from Eric Mogilnicki, WilmerHale, counsel to Bank of America, the lead lender for Project AMP (Mar. 6, 2012) (on file with author).

had not signed any PPAs, had not purchased any solar panels, and had not begun construction at any locations.¹⁴⁵

Consistent with Project AMP's lack of preparedness to commence construction, Fitch Ratings imposed a "framework" methodology to rate the credit risk of Project AMP.¹⁴⁶ Fitch explained that, due to a lack of negotiated prices, a lack of known product suppliers, and a lack of PPAs, Fitch could not model cash flows or consider the credit quality of the businesses the project would transact with.¹⁴⁷ For this reason, Fitch mandated the use of a framework approach that imposed minimum credit quality requirements and other controls to ensure adequate credit quality relating to future transactions.¹⁴⁸ Fitch also required that Project AMP return to Fitch to receive ratings for each phase prior to seeking DOE loan disbursements consistent with the framework approach.¹⁴⁹ As of March 6, 2012, Project AMP had not sought ratings for any phase of Project AMP.¹⁵⁰ This further clarifies the extent of Project AMP's failure to commence construction.

While the credit rating methodology appears appropriate given the circumstance, the need to apply this approach reflects Project AMP's failure to meet the specific requirements of the law. Nonetheless, DOE approved Project AMP's loan guarantee for \$1.4 billion dollars. DOE approval of this project on the final day with pressure from Secretary Chu reflects improper influence and recklessness that led to an extremely large and inappropriate loan commitment.¹⁵¹

As we describe in Section D below, following DOE's approval of Project AMP, natural gas prices fell dramatically, resulting in substantially lower power prices in areas where natural gas generation provides the marginal supply of power. Lower market prices for power reduce potential revenue for all PPAs – in other words, solar power directly competes against natural gas fired generation. Had Project AMP locked in PPAs at the time DOE approved its loan, this loss of potential revenue would have been avoided. Given the lag between approval and PPA negotiation, price risk materialized, likely reducing the aggregate value of Project AMP as a direct consequence of Secretary Chu's inappropriate approval.

Had DOE rejected Project AMP due to its failure to commence construction, the government and participants in the project would have avoided misallocating capital to a project that was premature.

C. DOE Violated the Statutory Requirement of "Superiority," Illegally Benefiting Banks at the Expense of Taxpayers

When it created the loan guarantee program, Congress took several steps to protect taxpayer funds and limit the DOE's risk exposure. These restrictions are recited in § 1702 of the

¹⁴⁵ *Id.*

¹⁴⁶ See Fitch Ratings, "Credit Rating for ProSun Project Company, LLC. - Project AMP" (August 21, 2011).

¹⁴⁷ See *id.* for additional detail on ratings approach provided through discussions with Fitch Ratings staff responsible for Project AMP ratings and Bank of America staff involved with Project AMP.

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ Mogilnicki, *supra* note 144.

¹⁵¹ See Ryan Tracy and Cassandra Sweet, *Emails Show Chu's Loan-Deal Role*, WALL ST. J., Feb. 18, 2012 available at <http://online.wsj.com/article/SB10001424052970204059804577229661338221828.html>.

Energy Policy Act and by statute apply to *all* loan guarantees issued under title XVII.¹⁵² One of the most important risk-limiting provisions requires the Secretary to secure a superior claim to any assets in the event of a default.¹⁵³ The statute unequivocally requires that these rights must be “superior to the rights of any other person.”¹⁵⁴ This common-sense rule ensures that if the U.S. government is on the hook to pay off creditors, it should be able recover at least some of its losses.

This right to superiority over collateral is appropriate given that taxpayers enabled the transaction through provision of a subsidy. Given the substantial risk associated with DOE loan guarantees and the lack of any potential for the taxpayer to profit, the law required that the DOE at least maintain a superior position with respect to collateral to protect taxpayers in the event that a project failed. Private banks stand to profit if a project succeeds, while also avoiding substantial downside risk if a project fails. Given these clear benefits to lenders, Congress determined that lenders should not also gain parity with the DOE on the rights of collateral and inserted the “superiority” provision to prevent weakening the taxpayer’s position.

In what can only be considered a preemptive bailout for banks, DOE eliminated taxpayer protections by agreeing to share its rights in the collateral of failed projects with private lenders. Notwithstanding the clarity of the statutory requirement and the policy basis for it, the DOE enacted regulations that allowed banks to gain parity with the United States with regard to collateral.¹⁵⁵ While this may have increased its lending authority, it did so by weakening the taxpayer’s protections.

A review of the seven Financial Institution Partnership Program based loan guarantees reveals that DOE agreed to share its collateral rights with the lenders for all FIPP loans issued after enactment of the DOE regulations.¹⁵⁶ Instead of selectively sharing collateral for the safest projects, DOE instead applied this approach to all FIPP loans, irrespective of the highly varying deal terms, credit quality and loan amounts.¹⁵⁷ In no case did DOE withhold this benefit from banks to protect taxpayers. In effect, DOE behaved as if its new interpretation of the law *mandated* that banks be placed on par with taxpayers.

1. Superiority of Rights vs. *Pari Passu* Sharing

In the event of a default, a loan guarantee provides assurances to banks and other lenders that they will recover 80% of the money loaned to the renewable energy project.¹⁵⁸ This money comes from the American taxpayer. Under the system designed by Congress, while taxpayers

¹⁵² 42 U.S.C. § 16512 (“... the Secretary shall make guarantees under this or any other Act for projects on such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, only in accordance with this section).

¹⁵³ 42 U.S.C. § 16512(g)(2)(B) (“The rights of the Secretary, with respect to any property acquired pursuant to a loan guarantee or related agreement, shall be superior to the rights of any other person with respect to the property”).

¹⁵⁴ *Id.*

¹⁵⁵ 74 Fed. Reg. 63,544 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

¹⁵⁶ See “Terms and Conditions relating to loan agreements for all DOE-backed FIPP projects agreed to after December 4, 2009” (on file with author).

¹⁵⁷ *Id.*

¹⁵⁸ See 42 U.S.C. § 16512(c) (stating “a guarantee by the Secretary shall not exceed an amount equal to 80% of the project cost of the facility that is the subject of the guarantee...”).

are on the hook for at least 80% of the loan in case of default, they will at least be in first position to try to recover their investment based on the sale of the defaulting company's assets.¹⁵⁹ However, under the contracts awarded under § 1705, DOE included *pari passu* terms, which puts a lender in a position equal to the taxpayer with respect to rights to collateral.

The Department of Energy's approach ignores the plain letter of the law. Section 1702(g)(2)(B) contains the *Superiority of Rights* provision ("*Superiority*").¹⁶⁰ *Superiority* provides that "[t]he rights of the Secretary, with respect to any property acquired pursuant to a guarantee, shall be superior to the rights of any other person with respect to the property." The statute clearly requires that DOE maintain superiority with regard to assets acquired as a result of a guarantee, and, as a result, precludes sharing the collateral with other creditors. Such sharing of collateral also flies in the face of the FIPP program requirements, which mandate loan guarantees to cover no more than 80% of any loan.

Consider the following hypothetical example:

DOE guarantees 80% of a billion dollar loan, which defaults. Upon default, the DOE pays \$800 million to the senior creditor protected by the DOE loan guarantee. Assume the leftover assets are worth \$500 million. Under this Administration's *pari passu* construct, DOE shares its senior rights to the recovery with the senior lenders, who already received \$800 million from the loan guarantee. Therefore, DOE recovers 80% of the \$500 million recovery, or \$400 million; the non-guaranteed lenders recover an additional 20% of the \$500 million, which equals \$100 million.

Recall that the lenders already recovered \$800 million for their guaranteed portion. This means that in the aggregate, the private lenders that received the DOE loan guarantee recovered \$900 million of the total billion dollar loan or 90%. Yet the law intended for taxpayers to be in first position with respect to the full \$500 million in this hypothetical. Accordingly, *Pari Passu* terms directly violate the FIPP solicitation requirements.

2. Congress Specifically Considered and Rejected Changes to the Superiority Provision that Would Have Allowed for *Pari Passu* Credit Terms

Supporters of *pari passu* credit terms for DOE loan guarantees sought to change the law to allow for such credit structures. On July 16, 2009, Senate Bill S. 1462, which would have modified Title XVII to allow for *pari passu* credit terms by disabling the *Superiority* provision, was passed by the Senate Energy and Natural Resources Committee, but failed to pass the full Senate.¹⁶¹ Also, in the last Congress, the House of Representatives passed "Cap and Trade," under H.R. 2454. That bill had an identical provision to disable *Superiority* under Title XVII. H.R. 2454 also failed to become law.

The time invested in drafting a bill and seeking to pass it in both the Senate and the House reflects the effort and analysis that many lawmakers put into this issue. This is the clearest evidence that Congress does not recognize the DOE's authority to provide § 1705 loans

¹⁵⁹ See 42 U.S.C. § 16512(g)(2)(B).

¹⁶⁰ *Id.*

¹⁶¹ See S. 1462, 111th Cong. § 103(b)(3) available at http://energy.senate.gov/public/_files/s1462pcs1.pdf.

with *pari passu* terms. Rather, the law requires *Superiority* to apply to any property acquired pursuant to the original guarantee or binding agreement to provide a guarantee.

3. The Department of Energy Knowingly Violated the Law

Notwithstanding Congress's rejection of these bills that were designed to weaken taxpayer protections, on December 4, 2009, the DOE issued final regulations to allow for *pari passu* treatment of DOE loan guarantees.¹⁶² By these actions, the DOE disregarded the law and Congress. The specific approach used in both S. 1462 and H.R. 2454 highlights the fact that the law currently does not allow for *pari passu* treatment specifically due to the *Superiority* provision. DOE's awareness of Congress's failure to change the law indicates DOE understood it may be violating the law when it provided loan guarantees with *pari passu* credit terms.

The Committee raised these concerns in a letter to the Secretary dated December 7, 2011.¹⁶³ The Department of Energy responded by asserting that § 1702(g)(2)(B) only "governs post-default rights of the Secretary, rather than conditions that must be met at the time the Secretary determines to make a loan guarantee."¹⁶⁴ Under the DOE's interpretation of the statute, "[o]nce the Secretary has actually acquired property through the Secretary's right of subrogation in a post-default situation, the statute provides that, as a matter of law, the Secretary's rights in that acquired property are superior to any other claimant with respect to that requirement."¹⁶⁵

The Department's interpretation is lacking on three levels. First, the Secretary can only secure his superior of rights in collateral *before* entering in a loan guarantee contract. To say § 1702(g)(2)(B) only applies after a default renders the provision useless. Second, the preceding quotation from the DOE's response letter evinces the circularity of its logic: once the Secretary has actually acquired property through the right of subrogation, there is no need to provide for a superiority of rights: he has already acquired the property. Finally, the Department's interpretation ignores Congress' clear pronouncements of its understanding that § 1702(g)(2)(B) prohibits *pari passu* terms. The DOE has never addressed these clear statements of congressional intent.

IV. DOE Has Artificially Inflated Job Creation Statistics

One characteristic of "green jobs" often touted by the Obama Administration is that green industries rely heavily on manpower, a trait that "makes them especially alluring when it comes to government-led job creation" measured in terms of jobs "created or saved."¹⁶⁶ In studies heralding the creation of large numbers of jobs in green jobs programs, there is a consistent preference for inefficiency.¹⁶⁷ This is contrary to the fundamental economic principle that high

¹⁶² 74 Fed. Reg. 63544, 63545 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

¹⁶³ Letter from Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform, to the Honorable Steven Chu, Sec'y of Energy (Dec. 7, 2011).

¹⁶⁴ Letter from David G. Frantz, Acting Executive Director, Department of Energy Loan Program Office, to Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform (Jan. 19, 2012).

¹⁶⁵ *Id.*

¹⁶⁶ Liz Wolgemuth, *The Truth and Green Jobs*, U.S. NEWS AND WORLD REPORT, Mar. 25, 2009 available at <http://money.usnews.com/money/careers/articles/2009/03/25/the-truth-about-all-those-green-jobs>.

¹⁶⁷ *Witnesses Provide Various Definitions of Green Jobs Before House Workforce Panel*, DAILY LABOR REPORT, Apr. 4, 2009 at 60.

labor productivity is a measurement of an efficient and healthy economy.¹⁶⁸ The DOE's 1705 Loan Guarantee Program follows this flawed principle precisely. According to a leading expert, an economy based on "high paying, low-productivity jobs ... would require an economic structure unknown in human history."¹⁶⁹

While the energy sector is a very large source of employment, it is a mistake to treat it as a government jobs program. Dr. David Montgomery, Senior Vice President at NERA Economic Consulting and a former CalTech professor, has explained:

It is a fundamental error in policymaking and economics to design or justify federal support for new energy technologies as a jobs program. It subverts the entire purpose of government involvement in R&D, and is the greatest single cause of the continued failure of energy technology programs.¹⁷⁰

However, even accepting the premise that it is appropriate to base a jobs program on green energy development, the Administration fails at this objective.

In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people.¹⁷¹ The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading. In reality, the 60,000 number includes jobs that existed at one time, but have since been eliminated; jobs that exist independent of the loan program; and jobs that already existed, but are now considered "green jobs."

One example of DOE's misrepresentation of jobs figures relates to a DOE loan guarantee to Ford Motor Company. DOE proclaims that this project, funded through the ATVM program, accounts for 33,000 of the 61,383 jobs. However, these jobs, which DOE represents to be "permanent jobs created or saved," already existed. Upon closer examination, it appears that DOE reports that the DOE loan "converted" existing jobs to green energy jobs.¹⁷² Had no loan occurred, presumably, the factory would continue to produce non-green energy vehicles; there is no evidence that Ford planned to lay off 33,000 employees if the company had not received the loan. This jobs statistic is also misleading given the statements of David Frantz, Acting Executive Director Loan Program Office and Acting Director ATVM to Committee staff. Mr.

¹⁶⁸ *Green Jobs and Red Tape: Assessing Federal Efforts to Encourage Employment: Hearing Before the Subcomm. on Investigations and Oversight of the H. Comm. on Science, Space, and Technology*, 112th Cong. (2011) (testimony of W. David Montgomery).

¹⁶⁹ Andrew P. Morriss et. al., *7 Myths About Green Jobs*, PERC Policy Series, No. 44, 2009 available at <http://www.perc.org/files/ps44.pdf>.

¹⁷⁰ Prepared Testimony of W. David Montgomery before the Subcomm. on Investigations and Oversight, H. Comm. on Science, Space and Technology, Apr. 13, 2011, available at http://www.nera.com/nera-files/Montgomery_Testimony_4_13_11.pdf

¹⁷¹ U.S. Dep't of Energy Loan Programs Office, "Projects" available at: https://lpo.energy.gov/?page_id=45.

¹⁷² U.S. Dep't of Energy Loan Programs Office, "Projects: Ford Motor Company" available at <https://lpo.energy.gov/?projects=ford-motor-company>.

Frantz stated during a phone interview, “[ATVM] is not a jobs program. [Job creation] is not a governing factor when we do a deal. It’s only a matter of record.”¹⁷³

The screenshot shows the U.S. Department of Energy Loan Programs Office website. The header includes the DOE logo, the text "U.S. DEPARTMENT OF ENERGY LOAN PROGRAMS OFFICE", and navigation links for "ABOUT LPO", "GET STARTED", "RESOURCE LIBRARY", "OUR PROJECTS", and "PROGRAMS: 1703 1705 ATVM". A search bar and an "APPLY" button are also present. Below the header, a green banner reads "Advanced Technology Vehicles Manufacturing Loan Program (ATVM)". The main content area features a photo of a white Ford SUV with "HYBRID" and "e" branding, a woman standing next to it, and the Ford logo. To the right of the photo is a table with project details.

Project	Ford Motor Company
Technology	Motor Vehicle Manufacturing
Location	Michigan
Loan Amount	\$5.907 billion
Eligibility	ATVM
Status	Closed
Date of agreement	Sep 2009
Jobs Construction	N/A
Perm Jobs Created or Saved	33,000
Generation Capacity (MW)	N/A

DOE also includes failed projects and a project that refused DOE funding in its job creation numbers. Despite Solyndra going bankrupt and firing all of its employees, as of February 20th, 2012, DOE still lists Solyndra as creating 3,000 construction jobs (see figure below). While those jobs may have briefly existed, touting jobs for a defaulted project that lost hundreds of millions in taxpayer dollars and including those jobs in a total jobs count prominently displayed on DOE’s website is inappropriate and misleading.

¹⁷³ Interview with David G. Frantz Acting Director ATVM Program Jan. 13, 2012.

Some of the projects LPO supports include:

- The first two all-electric vehicle manufacturing facilities in the U.S.
- The world's largest wind farm to date
- Two of the country's first commercial-scale cellulosic ethanol plants
- The first nuclear power plant to be built in the U.S. in the last three decades
- The first distributive photovoltaic energy project on a national scale which places solar panels on commercial rooftops across 28 states
- Several of the world's largest solar generation facilities to include:
 - The largest utility scale photovoltaic generation facility to date
 - The largest concentrated solar power plants in the world, two of which have the world's largest thermal energy storage systems



Program	Technology	Loan Guarantee Amount	Jobs (permanent/ construction)	Date of agreement	Locations	Status
1703						

DOE continues to include in its list of projects a \$105 million loan guarantee it finalized with POET, LLC to build an ethanol plant. According to DOE's website, POET, LLC's loan guarantee will create 40 permanent jobs and 200 construction jobs. However, POET announced on January 23, 2012, that it had decided not to accept the DOE loan guarantee because it had acquired private financing.¹⁷⁴ Despite POET declining DOE's money, as of February 20, 2012, DOE had continued to include it in its job creation numbers (see figure below).

DOE also includes 180 jobs that Abound Solar announced, on February 29, 2012, it will be laying off due to a "retooling" of manufacturing facilities. Abound struggles to compete with Chinese manufactures that provide a comparable solar panel for a more competitive price. When asked about the layoffs, Abound's CEO, Craig Witsoe, stated, "We hate to have any job loss in the company. But it was the right decision for the business."¹⁷⁵ Of the \$400 million DOE loan guarantee received by Abound, the company had already drawn down \$70 million at the time of the layoffs.

¹⁷⁴ Timothy Gardner, *Ethanol maker POET declines U.S. government loan aid*, REUTERS, Jan. 23, 2012 available at <http://www.reuters.com/article/2012/01/23/us-usa-ethanol-loanaid-idUSTRE80M20K20120123>.

¹⁷⁵ Matthew Mosk, *More Green Energy Layoffs: Colorado Solar Firm Cuts Workforce in Half*, ABC NEWS, Feb. 29, 2012 available at <http://abcnews.go.com/Blotter/abound-solar-lays-off-180-workers/story?id=15816806>.

DOE also incorporates jobs figures for Fisker Automotive (Fisker), which announced a 26 employee layoff on February 6, 2012, at their Wilmington, Delaware plant, as well as for Beacon Power Corp, which filed for Chapter 11 bankruptcy in October 2011, eliminating 34 construction and permanent jobs.

In addition to misleading the public regarding the number of permanent jobs created by the loan program, DOE obfuscates the number of jobs “created” by combining temporary and permanent jobs. For each listed loan and loan guarantee project, DOE provides a figure for permanent jobs and construction jobs. As loan projects generally require significant construction, these projects predominantly create temporary construction jobs, which terminate upon a project’s completion. For example, solar generation projects require few permanent employees to maintain and operation the facility. In the case of Antelope Valley Solar Ranch, DOE’s posting reflects 350 temporary construction jobs and only 20 permanent jobs. Nonetheless, DOE reports the number of jobs “saved or created” as 370, even though 95% are temporary.

V. The Broken Process for Awarding Loan Guarantees

A. External Pressures on the Program

DOE’s Inspector General explained that the administration of Recovery Act funds proved to be “more challenging than many had originally envisioned,”¹⁷⁶ and specifically asserted that “the loan guarantee program could not always readily demonstrate through documentation how it resolved or mitigated relevant risks prior to granting loan guarantees.”¹⁷⁷ In addition to these concerns, the Committee has also discovered the existence of a revolving door of persons who worked at green energy investment groups only to later be hired by the Administration, which present significant conflicts of interest. These connections raise the specter of undue influence over the loan guarantee process.

The Revolving Green Door

Nancy Ann DeParle

Nancy Ann DeParle, the current Deputy Chief of Staff for Policy in the White House, had a financial stake in the success of Granite Reliable, which received \$168.9 million loan from DOE. Prior to joining the White House, DeParle was a Managing Director of multi-billion dollar private equity firm CCMP and she both had a financial interest in and sat on the Board of Directors for Noble Environmental Power, LLC.¹⁷⁸ Noble owned Granite Reliable, a wind

¹⁷⁶ *The Green Energy Debacle: Where Has All the Taxpayer Money Gone?: Hearing Before the Subcomm. on Regulatory Affairs, Stimulus Oversight, and Government Spending of the H. Comm. on Oversight and Gov’t Reform, 112th Cong. (2011) (statement of Gregory Friedman, Inspector General, U.S. Dep’t of Energy).*

¹⁷⁷ *Id.*

¹⁷⁸ CCMP Capital Company Website available at <http://www.ccmpcapital.com/>.

energy project.¹⁷⁹ Prior to her departure, her position on Noble's board of Directors positioned her to understand the most confidential and material aspects of Noble Environmental and its subsidiary Granite Reliable. DeParle misrepresented her relationship with Noble Energy, claiming on disclosure forms that her interest had been divested, when in fact it had merely been transferred to her 10 year old son.¹⁸⁰

During her time at the White House, Granite Reliable sought and, in September 2011, obtained a partial guarantee of a \$168.9 million loan.¹⁸¹ Granite Reliable's application for a DOE loan guarantee was made at least by early 2010, and probably earlier than that, according to signed documents relating to the loan application. Noble sold Granite Reliable in December 2010 to Brookfield Asset Management, just 6 months prior to the conditional approval of the DOE loan guarantee and deep into the application process. The DOE loan guarantee was conditionally approved on June 2011 and finalized in September 2011. DeParle's ownership stake in Noble, which owned Granite Reliable, a beneficiary of a DOE loan, represents a clear conflict of interest.

Michael Froman

Michael Froman currently serves as the Deputy Assistant to the President and Deputy National Security Advisor for International Economic Affairs.¹⁸² He was a friend of President Obama's from law school,¹⁸³ and supported his political career by bundling over \$200,000 for his 2008 presidential candidacy.¹⁸⁴

Prior to his arrival at the White House, Froman was the Managing Director of Alternative Investments at Citigroup,¹⁸⁵ where he managed infrastructure and sustainable development investments.¹⁸⁶ Citigroup became a major investor in SolarReserve,¹⁸⁷ which ultimately received a \$737 million loan guarantee in September 2011.¹⁸⁸

¹⁷⁹ Press Release, Noble Environmental Power, Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project (Dec. 7, 2010) *available at* http://www.noblepower.com/pressroom/documents/10-12-7_NEP-SignsAgreementForSaleOfNHWindProject_Final.pdf.

¹⁸⁰ Nancy Ann DeParle, Executive Branch Personnell Public Financial Disclosure Report (Mar. 9, 2009) *available at* <http://www.scribd.com/doc/62509267/DeParle-Nancy-Ann-278-10A>.

¹⁸¹ U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: Granite Reliable" *available at* <https://lpo.energy.gov/?projects=granite-reliable>.

¹⁸² Center for Responsive Politics, "Barack Obama Bundlers," OpenSecrets *available at* <http://www.opensecrets.org/pres08/bundlers.php?id=N00009638>.

¹⁸³ Jonathan Weisman, *Obama Taps Froman For Joint Security*, *Economic Post*, WALL ST. J., Jan. 30, 2009 *available at* <http://online.wsj.com/article/SB123328110238231817.html>.

¹⁸⁴ OpenSecrets, *supra* note 182.

¹⁸⁵ DealBook, *Citigroup Fund Hit a Speed Bump*, N.Y. TIMES, July 20, 2009 *available at* <http://dealbook.nytimes.com/2009/07/20/citigroup-funds-hit-speed-bump/?ref=michaelfroman>.

¹⁸⁶ Press Release, Harvard Law School, Michael Froman '91 joins White House in joint security, economic post (Feb. 3, 2009) *available at* http://www.law.harvard.edu/news/2009/02/03_froman.html.

Steve Westly

Steve Westly co-founded the Westly Group, a clean energy venture capital firm that, according to DOE records, has reaped over \$600 million in DOE loans for its portfolio of investments.¹⁸⁹ One recipient company was Tesla Motors,¹⁹⁰ a premium electric vehicle manufacturer to which DOE awarded a \$465 million loan guarantee in January 2010.¹⁹¹ Westly also sat on Tesla's Board of Directors in the company's early days.¹⁹²

Westly is a personal friend of President Obama and bundled over \$500,000 for his 2008 campaign.¹⁹³ Since the election, Westly has visited the White House multiple times for both business and pleasure, and has privately dined with the President in small group fundraising settings.¹⁹⁴

After President Obama's election, Westly was rumored to have been a primary candidate for Energy Secretary.¹⁹⁵ When Secretary Chu received the appointment, Westly was given the opportunity to serve on an advisory board to the DOE, "a pivotal [sic] advisory committee that made recommendations to the secretary on alternative energy policies."¹⁹⁶ One committee initiative included a recommendation to modify federal rebates for electric cars, a change that would benefit companies such as Westly Group's Tesla.¹⁹⁷ E-mails released by the White House also indicate that Westly's advisory role gave him access to Obama's top advisors and senior White House officials, including advisor Valerie Jarrett.¹⁹⁸

David Sandalow

¹⁸⁷ Jim McElhatton, *Feds guarantee \$1 billion in new solar loans*, WASH. TIMES, Sept. 28, 2011 available at <http://www.washingtontimes.com/news/2011/sep/28/feds-guarantee-1-billion-in-new-solar-loans/?page=all>.

¹⁸⁸ U.S. Dep't of Energy Loan Programs Office, "1705 Program: Projects" available at https://lpo.energy.gov/?page_id=45.

¹⁸⁹ Carol D. Leonnig and Joe Stephens, *Venture capitalists play key role in Obama's Energy Department*, WASH. POST, Feb. 14, 2012 available at http://www.washingtonpost.com/politics/venture-capitalists-play-key-role-in-obamas-energy-department/2011/12/30/gIQA05raER_story.html.

¹⁹⁰ The Westly Group Company Website, "Portfolio" available at <http://westlygroup.com/portfolio/>.

¹⁹¹ U.S. Dep't of Energy Loan Programs Office, Advanced Technology Vehicle Manufacturing Program, "Projects: Tesla Motors" available at <https://lpo.energy.gov/?projects=tesla-motors>.

¹⁹² Stephen Frank, "Steve Westly: the Lynchpin to Funny White House Loans," California Political News and Views (Oct. 17, 2011) available at <http://capoliticalnews.com/2011/10/17/steve-westly-the-lynchpin-to-funny-white-house-loans/>.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ Leonnig and Stephens, *supra* note 189.

¹⁹⁷ Frank, *supra* note 192.

¹⁹⁸ Leonnig and Stephens, *supra* note 189.

David Sandalow currently serves as the Assistant Secretary for Policy and International Affairs at DOE, where he acts as Secretary's Chu's principal adviser on energy policy as well as coordinates DOE's foreign policy involvement.¹⁹⁹

Sandalow's ties to the White House date back to the Clinton Administration, during which he worked with President Clinton on environmental issues.²⁰⁰ After having gained this experience, Sandalow became the influential Chair of the Energy & Climate Working Group of the Clinton Global Initiative.²⁰¹ He went on to advise President Obama's presidential campaign in 2008.²⁰²

Prior to joining the Obama Administration, Sandalow was a senior advisor to Good Energies, Inc., an energy-focused venture capital firm.²⁰³ Good Energies is an investor in SolarReserve,²⁰⁴ a solar power company that received a \$737 million loan guarantee from DOE in September 2011.²⁰⁵

Sanjay Wagle

Sanjay Wagle has most recently served as Renewable Energy Advisor to DOE under Secretary Chu, where he helped oversee the \$11 billion renewable energy program under the Recovery Act.²⁰⁶ Wagle was an Obama fundraiser for the 2008 presidential campaign, garnering much of his support through his *Clean Tech for Obama* group. Another venture capitalist that has acquired an influential role at DOE, his industry colleagues believed that Wagle, among others, "would help ensure commercial successes from 'the steady flow of dollars coming out of DC.'"²⁰⁷

Prior to arriving in Washington, Wagle was a principal at Vantage Point Venture Partners (Vantage Point), a cleantech venture capital firm whose investments received \$2.4 billion in taxpayer funds.²⁰⁸ Among them were Brightsource, which received \$1.6 billion for solar generation; Tesla Motors, which received \$465 million for electric car manufacturing; and

¹⁹⁹ Energy.gov, "About Us: David Sandalow" available at <http://energy.gov/contributors/david-sandalow>; "Who Runs Gov: David Sandalow," WASH. POST available at http://www.washingtonpost.com/politics/david-sandalow/gIQAR6wHAP_topic.html.

²⁰⁰ "Who Runs Gov: David Sandalow," *supra* note 199.

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ Press Release, The White House, President Obama Announces More Key Administration Posts (Mar. 20, 2009) available at <http://www.whitehouse.gov/the-press-office/president-obama-announces-more-key-administration-posts-32009>.

²⁰⁴ Good Energies Company Website, "Investments" available at <http://www.goodenergies.com/investment/companies>.

²⁰⁵ U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: SolarReserve, LLC" available at <https://lpo.energy.gov/?projects=solarreserve-llc-crescent-dunes>.

²⁰⁶ Leonnigg and Stephens, *supra* note 189; Event Announcement, Full Circle Fund, Environment/Energy Circle Meeting (Nov. 16, 2011) available at <http://www.fullcirclefund.org/event.php?id=838>.

²⁰⁷ Leonnigg and Stephens, *supra* note 189.

²⁰⁸ *Id.*

Mascoma, which received \$80 million for an ethanol plant.²⁰⁹ Wagle left Vantage Point and moved to DOE shortly after Obama's election, "just as the administration embarked on a massive program to stimulate the economy with federal investments in clean-technology firms."²¹⁰ His former firm and the companies it invested in, therefore, had a large stake in the financing decisions being made by DOE at the time.²¹¹

Steve Spinner

Steve Spinner served as an advisor to Secretary Chu from April 2009 to September 2010. In that position, Spinner helped oversee the strategic operations of the clean energy loan guarantee program under the Recovery Act.²¹² Spinner was previously an energy-focused venture capitalist and high-tech consultant.²¹³ He is also an Obama bundler, having raised over \$500,000 for the President in 2008,²¹⁴ and over \$200,000 thus far for 2012.²¹⁵

Spinner's wife, Allison Berry Spinner, is a partner at Wilson Sonsini Goodrich & Rosati, the law firm that represented Solyndra on matters related to the DOE loan.²¹⁶ According to federal records, the firm received at least \$2.4 million in federal funds for legal fees related to the representation.²¹⁷

White House e-mails released late last year indicate that Spinner was influential in securing the \$528 million loan to now-bankrupt Solyndra. Many of those emails were written just days after he signed an ethics agreement pledging that he would "not participate in any discussion regarding any application involving" his wife's law firm.²¹⁸ In one message to a DOE official on August 28, 2009, Spinner wrote, "How hard is this? What is he waiting for? . . . I have OVP and WH breathing down my neck on this."²¹⁹ The e-mail went on to demand that the DOE official "walk over there and force [the official working on the Solyndra evaluation] to give [him] an answer."²²⁰ After just being contacted by Solyndra, Spinner inquires in another e-mail, "Any word on OMB? Solyndra's getting nervous."²²¹ The e-mail correspondence occurring in the final days before the Solyndra loan closed in September 2009 centers heavily on Spinner's

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² Matthew Daly, *Steve Spinner, Energy Department Advisor, Pushed Solyndra Loan, Emails Show*, HUFFINGTON POST, Oct. 7, 2011 available at http://www.huffingtonpost.com/2011/10/07/obama-fundraiser-pushed-s_n_1000826.html.

²¹³ Matthew Mosk, *Obama Fundraiser Pushed Solyndra Deal From Inside*, ABC NEWS, Oct. 7, 2011 available at <http://abcnews.go.com/Blotter/obama-fundraiser-pushed-solyndra-deal-inside/story?id=14691618#.TzrE9MXQIsI>.

²¹⁴ OpenSecrets, *supra* note 182.

²¹⁵ BarackObama.com, "Obama For America Victory Fund 2012 Volunteer Fundraisers" available at <http://www.barackobama.com/pages/volunteer-fundraisers-Q2/>.

²¹⁶ Mosk, *supra* note 213.

²¹⁷ Daly, *supra* note 212.

²¹⁸ Mosk, *supra* note 213.

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

efforts to coordinate plans for either the President or Vice President to announce the first loan approval at a scheduled visit to Solyndra.²²²

Peter Weeks

Peter Weeks currently serves as Clean Energy Advisor at DOE, a position to which he was appointed in March 2009.²²³ To be clear, there is no apparent connection between Mr. Weeks and a project that received a loan from DOE. However, his profound lack of experience in the renewable energy arena before being named as a top DOE advisor causes some concern. Prior to joining the Administration, Weeks's resume consisted primarily of Democratic campaign positions with groups such as Obama for America, Maine Democratic Party, Kerry for President, and Gephardt for President.²²⁴ His prior experience was limited to communications and politics, and includes no record of any energy policy expertise.²²⁵

According to Weeks, his work at DOE has included helping to “develop due diligence and procurement plans of 200 awards worth over \$10 billion,” as well as “manage two multi-billion dollar energy tax programs.”²²⁶ Additionally, Department e-mails also indicate that Weeks participated in meetings with and had access to high-level officials,²²⁷ including Ron Bloom, giving him the opportunity to participate in decisions and exert some degree of influence.²²⁸ Weeks's position at DOE appears to involve highly technical issues with high stakes and great sensitivity.

It is puzzling how someone without any prior energy, project management, or finance experience would be appointed to a position with responsibilities of this magnitude and particular nature. A private sector institution responsible for due diligence for billions of dollars in loans would never trust someone with only campaign experience to be involved with such technical issues. Given Weeks's consistent history of strong support of the Democratic Party and President Obama, his appointment adds to the perception that many of the Administration's decisions have been driven by politics as opposed to any viable, coherent, energy policy.

VI. Concerns Relating to Section 1705 Loan Guarantee Recipients

A. Solopower at CCC+ Setting the Standard for Inappropriate Loan Commitments

²²² *Id.*

²²³ Peter Weeks, Linked In, Profile available at <http://www.linkedin.com/in/weekspeter>.

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ E-mail from Peter Weeks, Clean Energy Advisor, U.S. Dep't of Energy, to Brandon Hurlbut, Udai Rohatgi, Peter Gage, Tom Reynolds, and Rachel Tronstein (Feb. 23, 2011, 6:36 PM EST) (on file with author).

²²⁸ *Id.*

Solopower is a European firm that seeks to build a solar factory in Oregon. Solopower accepted \$40 million of Oregon taxpayer money in addition to DOE's approval of a \$197 million loan via the Federal Financing Bank (FFB).²²⁹ They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P). According to internal documents obtained by the Committee, S&P warned DOE that:

We believe that [average selling price (ASP) per watt] could decline to \$1 or less within the next 1-2 years. From the output provided by the DOE, we concluded that even if SoloPower achieves the efficiency and yield projections of the DOE's base case, an ASP of \$1 or less would severely strain SoloPower's ability to meet its debt service obligations.²³⁰

In other words, S&P predicted that Solopower will fail to meet its debt obligations. Additionally, the loan's already extremely poor S&P rating of CCC+ appears to depend on lender protections that prevent loan disbursements unless benchmarks are met:

It is to lenders' advantage that the company will not have access to the credit facility until it constructs and operates Line 1A at expected levels of performance. Similarly, the company cannot make the first or subsequent draws unless 30% of installed capacity is under contract to be sold.²³¹

According to S&P, these lender protections enable S&P to provide a CCC+. ²³² In short, the primary protection against losing \$197 million of taxpayer money is the small chance that Solopower will ever get the money. Without these protections, it can only be presumed that the credit rating would fall to levels reflecting default.

The story of Solopower reflects a very concerning form of waste that creates substantial uncertainty as a byproduct, tying up private investor capital and federal funds until the entity fails (or succeeds) to achieve targeted benchmarks. If Solopower fails to achieve success sufficient to receive DOE funds, then those private investors anticipating the benefit of DOE loans will suffer substantial loss, resources will have been wasted, and employees will be let go after a short time. However, if Solopower meets the requirements for disbursement, then the likelihood for failure and loss to the taxpayer are significant as the base case for the panel manufacturer's production costs does not reflect expectations for sufficiently competitive pricing.

What Solopower lacked in economic value, it made up for in political connections. Unlike other 1705 loan guarantee recipients, Solopower exerted bipartisan political influence on DOE through strong ties to both the Bush and Obama Administrations. Solopower itself built the ties to the Obama Administration. Bruce Khouri, who served on the Board of Directors²³³

²²⁹ Ted Sickinger, *Solyndra Meltdown a Cautionary Tale for Oregon and SoloPower, its Latest Solar Bet*, The Oregonian, Sept. 27, 2011, *available at* http://www.oregonlive.com/business/index.ssf/2011/09/solyndras_plight_casts_cautionary_tale_for_oregon_and_solopower_its_latest_solar_bet.html.

²³⁰ Standard & Poors Credit Report, Solopower, Inc., July 11, 2011 (on file with author).

²³¹ *Id.*

²³² *Id.*

²³³ Board of Directors, Solopower, *available at* <http://www.solopower.com/brucekhouri.html> (last visited Mar. 15, 2012).

and now serves as the Chief Commercial Officer,²³⁴ donated \$28,500 to the Democratic National Committee's "Obama Victory Fund" in 2008.²³⁵ Lou DiNardo, who served as interim CEO²³⁶ and now serves as Chairman of the Board of Directors, previously worked as a General Partner at VantagePoint Venture Partners where DOE stimulus advisor Sanjay Wagle worked.²³⁷ Solopower, based in San Jose, California, developed an ally in Democratic San Jose Mayor Chuck Reed. Mayor Reed sent letters to DOE and talked with DOE's Jonathan Silver in person to advocate for and attempt to speed up Solopower's loan guarantee.²³⁸

Hudson Clean Energy Partners, the biggest investor in Solopower,²³⁹ had strong ties to the Bush-era DOE. Craig Cornelli, a member of the Board of Directors at Solopower and Managing Director at Hudson Clean Energy Partners, and Alexander Karsner, a member of the Hudson Clean Energy Partners Advisory Board, both worked in renewable energy positions for DOE during the Bush Administration.²⁴⁰ Another Managing Partner for Hudson Clean Energy Partners, Neil Auerbach, donated tens of thousands of dollars to Republicans in 2008.²⁴¹ Hudson Clean Energy Partners also retained BlueWater Strategies to lobby both branches of Congress and the White House.²⁴² According to BlueWater Strategies' website, Andrew Lundquist, founder and Managing Partner, "led George W. Bush's transition team for the Department of Energy" and "served as a senior advisor and strategist on energy issues for the President and Vice President."²⁴³

With its ties to DOE officials in both the previous and current Administrations, Solopower had people on both sides of the political aisle that could use their influence to pressure DOE into issuing and finalizing Solopower's loan guarantee.

B. Beacon Power: Taxpayers Predictably Lose Millions

Led by CEO F. William Capp – an Obama donor²⁴⁴ – Beacon Power became the second 1705 loan guarantee recipient to go bankrupt on October 31, 2011.²⁴⁵ Despite warnings from

²³⁴ Management, Solopower, available at <http://www.solopower.com/management.html> (last visited Mar. 15, 2012).

²³⁵ Federal Election Commission, FEC Form 3X filed by 2008 Obama Victory Fund, at 1650.

²³⁶ Press Release *SoloPower Prepares for Market Entry and Names Lou DiNardo as Interim CEO*, July 8, 2009, available at <http://www.solopower.com/ceov11.html>.

²³⁷ Lou DiNardo, SoloPower, available at <http://www.solopower.com/loudinardo.html> (last visited Mar. 15, 2012).

²³⁸ Aaron Glantz, *After Solyndra, a 2nd Solar Energy Firm Is Scrutinized*, N.Y. TIMES, Oct. 15, 2011, available at: <http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all>.

²³⁹ *Id.*

²⁴⁰ Joel Gehrke, *Solopower, a Connected Company with DOE Support*, THE EXAMINER, Nov. 9, 2011, available at <http://campaign2012.washingtonexaminer.com/blogs/solopower-connected-company-doe-support>.

²⁴¹ Aaron Glantz, *After Solyndra, a 2nd Solar Energy Firm Is Scrutinized*, N.Y. TIMES, Oct. 15, 2011, available at: <http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all>.

²⁴² *Id.*

²⁴³ Andrew D. Lundquist, available at http://www.bwstrategies.com/index.php?option=com_content&task=view&id=35&Itemid=22 (last visited Mar. 15, 2012).

²⁴⁴ Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?name=capp&state=MA&zip=&employ=&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=wsp3w&submit=Submit+your+Donor+Query> (last visited Mar. 15, 2012).

²⁴⁵ Dawn McCarty, *Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy*, BLOOMBERG, Oct. 31, 2011, available at: <http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html>.

both S&P and its own internal analysis regarding risky business models, DOE proceeded with a deal that will cost taxpayers millions in losses.

Before its demise, Beacon Power relied on funding from the federal government. DOE gave Beacon Power over \$25 million in grants.²⁴⁶ However, the largest investment came when DOE announced a conditional \$43 million loan guarantee to Beacon Power on July 2, 2009, to create a “20 megawatt flywheel energy storage plant” in Stephentown, New York.²⁴⁷ In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating, even though the rating incorporated the benefit of the \$43 million loan guarantee.²⁴⁸ The S&P rating noted that “Beacon is currently an unprofitable start-up” and that “significant exposure to commodity price volatility” could significantly hurt the company.²⁴⁹ S&P ran two default scenarios, both of which demonstrated that taxpayers would lose millions.²⁵⁰ DOE conducted its own risk analysis and also assigned Beacon Power a junk CCC+ rating.²⁵¹ DOE, however, ignored these warnings and finalized the loan guarantee in August 2010.²⁵²

As predicted, Beacon Power continued to remain unprofitable and burn through money at a rapid rate. In the weeks leading up to its bankruptcy, Beacon Power began spending hundreds of thousands of dollars on law firms.²⁵³ When Beacon Power went bankrupt, DOE tried to minimize the bad publicity by arguing that it had required “many protections for the taxpayer” in the loan guarantee contract.²⁵⁴ However, as Beacon Power continues to go through the bankruptcy process, DOE now admits that taxpayers will likely lose millions on this bad investment.²⁵⁵ DOE could have avoided these losses by taking the warnings of S&P and its own analysis seriously and not risking over \$39 million on a company destined for failure.

C. Abound Solar: Politics and a Risky Investment Collide

²⁴⁶ Steven Mufson and Juliet Eilperin, *Beacon Power Declares Bankruptcy; Second Loan Guarantee Recipient to Falter*, THE WASH. POST, Oct. 31, 2011, available at http://www.washingtonpost.com/national/health-science/beacon-power-declares-bankruptcy-second-loan-guarantee-recipient-to-falter/2011/10/31/gIQCNAaaM_story.html.

²⁴⁷ Press Release, *Obama Administration Offers \$59 Million in conditional Loan Guarantees to Beacon Power and Nordic Windpower, Inc.*, U.S. Dep’t of Energy, July 2, 2009, available at: <https://lpo.energy.gov/?p=834>. Beacon Power created a wholly owned subsidiary called Stephentown Regulation Services, LLC., that ran the DOE funded flywheel energy storage plant and directly received the DOE loan guarantee. When Beacon Power, the parent company, went bankrupt on October 31st, it decided to place its subsidiaries in bankruptcy as well. .

²⁴⁸ Letter from Swami Venkataraman, Standard & Poors, to Beacon Power, April 30, 2010 (on file with author).

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov’t Reform, Feb. 14, 2012 (on file with author).

²⁵² Beacon Power Corporation, U.S. Dep’t of Energy, available at <https://lpo.energy.gov/?projects=beacon-power-corporation> (last visited Mar. 15, 2012).

²⁵³ Beacon Power Bankruptcy Filings, Provided to Committee by U.S. DOE (on file with author).

²⁵⁴ Dawn McCarty, *Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy*, BLOOMBERG, Oct. 31, 2011, available at: <http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html>.

²⁵⁵ Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov’t Reform, Feb. 14, 2012 (Stating “the DOE stands to recover more than 70 percent of the taxpayer’s investment.” However, even if DOE recovered 80 percent of its investment, taxpayers would still lose millions).

On July 3, 2010, President Obama announced during his weekly radio address that DOE would again invest hundreds of millions of dollars in a risky solar panel manufacturer. Much like Solyndra, Abound Solar manufactures solar panels using unproven technology, received a dismal credit rating for its loan guarantee, and has strong Democratic political connections. In fact, DOE finalized Abound Solar's loan in the same month that DOE worked to restructure the failing Solyndra's loan.

In between DOE issuing Abound Solar its \$400 million conditional loan guarantee and finalizing it in December 2010, Fitch Ratings evaluated the project and assigned it a junk credit rating. Fitch gave the project a credit rating of "B" (worse than Solyndra's) with a recovery estimate of only 45%.²⁵⁶ Despite including the benefit of the DOE loan guarantee in the rating (which likely made the rating more favorable), Fitch labeled the project "highly speculative" and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures.²⁵⁷ In addition to these concerns, Fitch worried that Abound Solar needed to raise more private money to build its new facilities and that, if it could not, Abound Solar could default on its DOE loan.²⁵⁸

Recently, Abound Solar began encountering the financial problems that Fitch predicted. In line with Fitch's prediction, Abound Solar has recently struggled to raise additional capital, causing DOE to stop disbursing loan payments to the company.²⁵⁹ More troubling, Abound Solar announced on March 1st that it would stop producing solar panels and would fire 180 employees, even though it has already received \$70 million from DOE.²⁶⁰ Abound Solar continues to claim publicly that it does not have serious financial problems and will survive;

²⁵⁶ Letter from Jason Paraschac, Senior Director, Fitch Ratings, to Steve Abely, Chief Financial Officer, Abound Solar, Nov. 4, 2010 (on file with author).

²⁵⁷ See *id.* at 4

"Abound's lagging conversion efficiency negatively impacts the panel's installed costs which should negatively impact expected panel [average selling prices]. In addition, Fitch expects further price pressures in this market over the next 3-5 years..."

"Abound has not provided an explanation as to why gains in [solar panel] conversion efficiency have not materialized as expected..."

"[Average selling price] assumptions in the new model are significantly below the prior plan. While this may in part reflect the lower conversion efficiency of [Abound's] solar panel, it is largely a reflection of severe price contractions in the [solar photovoltaic panel] market over the past 24 months."

²⁵⁸ See *id.* at 7

"Abound must raise additional equity to fund the completion of its planned manufacturing facilities. An inability to access equity markets could force an early default of the loan before construction is complete but also before the loan is fully drawn down."

²⁵⁹ Yuliya Chernova and Cassandra Sweet, *California Solar Deal Hits a Snag*, THE WALL ST. J., Feb. 11, 2012, available at: <http://online.wsj.com/article/SB10001424052970203646004577214973345400202.html>.

²⁶⁰ Todd Woody, *Abound Solar, Recipient of \$400 Million Federal Loan Guarantee, Halts Production*, FORBES, Mar. 1, 2012, available at <http://www.forbes.com/sites/toddwoody/2012/03/01/abound-solar-recipient-of-400-million-federal-loan-guarantee-halts-production/>.

however, its inability to raise capital and meet DOE's requirements likely indicate serious troubles ahead for the company, as predicted by Fitch.

Abound Solar has ties to Democratic politicians at the federal level and the state level in Colorado. Bohemian Companies, LLC, founded by Pat Stryker, became an early investor in Abound Solar (at the time AVA Solar) in October, 2008.²⁶¹ In addition to the initial funding, the CEO of Bohemian Companies, Joseph Zimlich, has served as both a director²⁶² and a board member of Abound Solar.²⁶³ Pat Stryker is a major Democratic donor who *Forbes* included on its 2011 list of top liberal spenders.²⁶⁴ In 2008, Stryker donated \$50,000 and bundled \$87,500 for President Obama's 2009 inauguration, and has given \$35,800 to the 2012 Obama Victory Fund.²⁶⁵ Abound Solar also developed ties to Congressional Democrats. The company hired then Democratic Congressman Paul Kanjorski's nephew Russell as its vice president for marketing.²⁶⁶ Abound Solar supported the 2009 cap and trade bill in the House of Representatives and funded an advertisement thanking then-Colorado Democratic Congresswoman Betsy Markey for her vote in favor of the bill.²⁶⁷

At the state level, then-Democratic Colorado Governor Bill Ritter strongly supported Abound Solar and its application for a DOE loan guarantee. When Energy Secretary Chu visited Colorado, Governor Ritter handed Secretary Chu a letter urging him to approve Abound Solar's loan guarantee because it would allow the company to expand and hire new workers.²⁶⁸

The combination of Abound Solar's junk credit rating, financial problems, and the company's political connections raise serious concerns about whether DOE based the decision to invest \$400 million on merit and whether taxpayers could again lose millions on a dubious solar manufacturing project.

D. Ormat Nevada: Strong Ties to Harry Reid

Senate Majority Leader Harry Reid announced on September 23, 2011, that DOE finalized a \$350 million partial loan guarantee for three geothermal power plants owned by Ormat Nevada, Inc.²⁶⁹ Ormat also benefitted from the \$98.5 million loan guarantee to Nevada

²⁶¹ Press Release, *AVA Solar Completes \$104 Million Equity Financing*, Abound Solar, Oct., 2008, available at <http://www.abound.com/news/ava-solar-completes-104-million-equity-financing>.

²⁶² See: U. S. Securities and Exchange Commission Form D, AVA Solar, Inc., Dec. 21, 2010, available at: http://sec.gov/Archives/edgar/data/1391624/000139162410000003/xslFormDX01/primary_doc.xml.

²⁶³ See The Board of Governors of the Colorado State University System, Colorado State University System, available at <http://csusystem.edu/pages/board.asp>.

²⁶⁴ Jon Bruner and Clare O'Connor, *Liberal Spenders*, FORBES, Sept. 21, 2011, available at <http://www.forbes.com/forbes/2011/1010/forbes400-11-networks-data-driven-liberal-spenders-bruner-oconner.html>.

²⁶⁵ Keenan Steiner, Another Renewable Energy Loan Recipient Hires Lobbyists, has Fundraising Ties to Obama, Sunlight Foundation, Nov. 30, 2011, available at <http://reporting.sunlightfoundation.com/2011/another-renewable-grantee-hires-lobbyists-has-fundraising-ties-o/>.

²⁶⁶ Bill O'Boyle, *Kanjo Nephew Works at firm that Gets Loan*, THE TIMES LEADER, July 13, 2010, available at http://www.timesleader.com/news/Kanjo_nephew_works_at_firm_that_gets_loan_07-12-2010.html.

²⁶⁷ Thank You Betsy Markey, The Environmental Defense Action Fund, July 15, 2009, available at <http://www.youtube.com/watch?v=uvBD3XvRf2Y> (last visited Mar. 15, 2012).

²⁶⁸ Cathy Proctor, *Ritter Backing Colo. Companies Seeking Department of Energy Loan Guarantees*, DENVER BUS. J., May 17, 2009, available at <http://www.bizjournals.com/denver/stories/2009/05/18/story5.html?page=all>.

²⁶⁹ Press Release, *Reid Announces Finalized Loan Guarantee for Ormat Geothermal Projects*, United States Senator Harry Reid, Sept. 23, 2011, available at http://reid.senate.gov/newsroom/pr_092311_geothermalloan.cfm.

Geothermal (see below) as Ormat received an almost \$80 million engineering, procurement, and construction contract to build Nevada Geothermal's Blue Mountain plant.²⁷⁰

Meaningful ties exist between the Senator and Ormat. Two of Ormat's federal lobbyists previously worked for Senator Reid. Ormat's outside lobbyist, Kai Anderson of Cassidy and Associates, served as Senator Reid's Deputy Chief of Staff up until 2005.²⁷¹ Anderson lobbies both the House of Representatives and the Senate for Ormat.²⁷² Anderson has given close to \$90,000 to Democratic candidates and campaign committees over the past three cycles, including thousands to Senator Reid.²⁷³ Ormat's company lobbyist, Director of Policy and Business Development Paul Thomsen, served as a "Regional Representative" for Senator Reid through 2005.²⁷⁴ Thomsen gave thousands in political contributions to Senator Reid.²⁷⁵ During Senator Reid's 2010 reelection campaign, Thomsen starred in a campaign ad for Senator Reid to advertise the benefits of Ormat's loan guarantee for Nevada.²⁷⁶ In addition to Anderson and Thomsen, Ormat's President, Yoram Bronicki, gave thousands in political contributions to Senator Reid.²⁷⁷ The strong ties between the company and the Senate Majority leader raise questions about whether the DOE acted in the best interests of the American people when it approved the loan guarantee.

E. Nevada Geothermal's Blue Mountain Project

On June 15, 2010, DOE announced that it would conditionally issue a \$98.5 million partial loan guarantee to Nevada Geothermal Power Company (Nevada Geothermal).²⁷⁸ This loan enabled Nevada Geothermal to refinance the Blue Mountain Geothermal Project (Blue Mountain) through John Hancock Financial Services (John Hancock). In other words, the DOE

²⁷⁰ Nevada Geothermal Application for DOE Loan Guarantee, U.S. Dep't of Energy, Nov. 2, 2009 (on file with author).

²⁷¹ Eric Lipton and Clifford Krauss, *A U.S.—Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>; Kai S. Anderson, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available at http://www.legistorm.com/person/Kai_S_Anderson/201.html.

²⁷² See Lobbying Report for Cassidy & Associates, available at <http://soprweb.senate.gov/index.cfm?event=getFilingDetails&filingID=68E4AB5B-FB37-4072-AA8E-187A97BF8E66>.

²⁷³ Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?capcode=t3hhk&name=anderson,%20kai&employ=&cand=&state=DC&zip=&all=n&old=N&c2008=Y&c2010=Y&c2012=Y&sort=N&page=1>.

²⁷⁴ Eric Lipton and Clifford Krauss, *A U.S.—Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>; Paul Thomsen, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available at http://www.legistorm.com/person/Paul_Thomsen/30414.html; *Legislative Hearing on H.R. 2170, H.R. 2171, H.R. 2172 and H.R. 2173 Before H. Comm. on Energy and Power*, 112th Cong. (2011) (statement of Paul A. Thomsen, Director of Policy and Business Development, Ormat Technologies, Inc.).

²⁷⁵ Center for Responsive Politics, available at <http://www.opensecrets.org/indivs/search.php?name=&state=&zip=&employ=ormat&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=xbhnq&submit=Submit+your+Donor+Query> (last visited Mar. 15, 2012).

²⁷⁶ See Geothermal, Harry Reid 2010, June 10, 2010, available at http://www.youtube.com/watch?v=XvI_AY68BjQ&feature=plcp&context=C305c198UDOEgsToPDskIRhi7yhmpxqikeNWd9-nC0; *Reid Campaign Releases TV Ads on Clean Energy Jobs*, Friends for Harry Reid, available at http://www.harryreid.com/index.php/news/release/reid_campaign_releases_tv_ads_on_clean_energy_jobs/.

²⁷⁷ *Id.*

²⁷⁸ Press Release, *Energy Department Offers Conditional Commitment to Support Nevada Geothermal Development with Recovery Act Funds*, U.S. Dep't of Energy, June 15, 2010, available at: <https://lpo.energy.gov/?p=805>.

loan paid back a prior financial obligation of Nevada Geothermal. This was the first of DOE's "Financial Institution Partnership Program" (FIPP) loan guarantees, under Section 1705, where private investment groups worked with DOE to provide financing to energy projects.²⁷⁹ Less than three months after the conditional approval, DOE finalized this loan guarantee, enabling Nevada Geothermal to refinance a loan from TCW through John Hancock.²⁸⁰

The loan did not finance any new construction and therefore did not help to create a single new job. DOE's awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with well-established financial difficulties.

In the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain's potential, with Senator Reid saying that, "I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence. Northern Nevada is the Saudi Arabia of geothermal energy and I thank Secretary Chu for recognizing the Silver State's enormous job-creating potential to produce plenty of clean and affordable energy."²⁸¹ It was known to him at that time, however, that the loan would not create a single job, but instead simply refinance an existing loan, despite DOE's claim that it would create over 200 jobs.²⁸²

1. Misuse of the DOE Loan Guarantee as a Tool to Bailout Creditors

Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW. According to Nevada Geothermal's financial statements, the firm would not avoid default without the benefit of a loan guarantee.

On October 2, 2011, *The New York Times* ran a story about the financial difficulties of Nevada Geothermal, relying partially on a September 2011 Deloitte & Touche audit of the company which stated "significant doubt about the company's ability to continue as a going concern."²⁸³ In response, DOE dismissed the financial problems of Nevada Geothermal and instead pointed to the alleged financial health of Blue Mountain to argue that the loan guarantee would be repaid.²⁸⁴ Given that Nevada Geothermal's principal operation is Blue Mountain's Faulkner I Power Plant, such a distinction has questionable merit.²⁸⁵

²⁷⁹ Press Release, *Department of Energy Issues Loan Guarantee Supported by Recovery Act for Nevada Geothermal Project*, U.S. Dep't of Energy, Sept. 7, 2010, available at <https://lpo.energy.gov/?p=787>.

²⁸⁰ *Id.*

²⁸¹ *Id.*

²⁸² Loan Programs Office, U.S. Dep't Of Energy, available at https://lpo.energy.gov/?page_id=45 (last visited Mar. 15, 2012).

²⁸³ Eric Lipton and Clifford Krauss, *A U.S.-Backed Geothermal Plant in Nevada Struggles*, N.Y. TIMES, Oct. 2, 2011, available at <http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all>.

²⁸⁴ Peter Urban, *DOE Remains Confident in Nevada Geothermal Plant*, LAS VEGAS REVIEW-JOURNAL, Oct. 4, 2011, available at <http://www.lvrj.com/news/doe-remains-confident-in-nevada-geothermal-plant-131035678.html>.

²⁸⁵ See Nevada Geothermal Power Inc., Consolidated Financial Statements, June 30, 2010 at 6, available at http://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf.

As noted above, at the time DOE approved the conditional loan guarantee, Nevada Geothermal had already violated terms to the loan agreement with its primary creditor, TCW. Based on financial disclosures, Nevada Geothermal avoided default as a result of TCW's granting a waiver and extension in anticipation of the John Hancock financing backed by the DOE loan guarantee. The resulting DOE bailout of Nevada Geothermal was planned out in advance, as made clear by Nevada Geothermal's March 31, 2010 Financial Statements:

The Company has engaged John Hancock to provide long term debt up to \$95 million which will be used to pay down the TCW loan and to fund additional drilling. However, this potential John Hancock loan is subject to due diligence and final credit committee approval by John Hancock. There is no certainty that the anticipated debt financing through John Hancock will be obtained. **Failure to obtain the John Hancock loan, or a similar loan from another lender, and/or unsuccessful drilling may result in a default under the terms of the TCW loan agreement. In the event of a default TCW may elect to call the loan and execute upon the security, which would result in a material adverse effect on the Company,** including delay or indefinite postponement of operations and further exploration and development of our projects with the possible loss of such assets.²⁸⁶ (emphasis added)

The story continued to unfold in Nevada Geothermal's June 30, 2010 Financial Statements, where the plan to bailout their lender, TCW, was successfully executed by DOE:

As at June 30, 2010, the Company was not in compliance with the terms of the TCW loan. The non-compliance results from the Company having exceeded the maximum loan amount of \$180 million, and having exceeded the drilling expenditure budget by more than \$3.8 million, as well as some instances of technical non-compliance with other loan terms **As a result, for balance sheet purposes, the TCW long-term loan has been classified as a short-term liability.** On November 20, 2009, TCW agreed in principle to waive the non-compliance until March 31, 2010 in return for 4.5 million NGP Inc. warrants exercisable at CAD 1.50 (Note 21(f)). Subsequently, **TCW agreed to extend the agreement in principle, without change, until the John Hancock loan [guaranteed by DOE²⁸⁷] closed. The John Hancock loan was closed on**

²⁸⁶ Nevada Geothermal Power, Inc., Consolidated Financial Statements, Mar. 31, 2010, at 11, *available at* http://www.nevadageothermal.com/i/pdf/Q3_March_31_2010.pdf.

²⁸⁷ Nevada Geothermal Power, Inc., Consolidated Financial Statements, June 30, 2010, at 55, *available at* http://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf (Explaining the John Hancock loan guaranteed by DOE: "On October 13, 2009 the Company [Nevada Geothermal] announced that it appointed John Hancock Life Insurance Company ("John Hancock") to be the exclusive debt provider for up to \$95 Million 20-year term loan. Further to the above, on October 7, 2009, the DOE announced its Financial Institutions Partnership Program ("FIPP"), a program supported by the 2009 ARRA. The FIPP program is designed to facilitate long term financing for renewable development projects using commercial technology and applies to up to 80 percent of the loan amount. John Hancock, as Lender for the Blue Mountain 'Faulkner 1' geothermal project, made an application to the DOE for a Loan Guarantee under the FIPP. The loan guarantee was conditionally approved on June 15, 2010, and the loan closed on September 3, 2010....At the closing of the John Hancock/DOE loan after paying associated fees and funding reserve accounts for drilling, interest and plant maintenance the Company paid the TCW loan down to approximately \$86.9 million. The Company plans to apply for a second ARRA grant based upon work, to

September 3, 2010, and a repayment of \$81,076,669 was made on the TCW loan.²⁸⁸ (emphasis added)

Confirming this troubling misdirection of taxpayer funds, the Summary of Proposed Terms and Conditions for the Conditional Loan Guarantee, signed by Secretary Chu, provides that the “proceeds of the Guaranteed Obligation will be used for the following: (i) Partial repayment of intercompany loan from HoldCo [Blue Mountain], in the amount of approximately 80 million;...”²⁸⁹ This intercompany repayment would ultimately flow to TCW as described above. The remaining amount of the loan went to the posting of cash collateral to NV Energy, Inc., funding a debt service reserve account, funding a maintenance reserve account, funding a drilling expenditure account (which included already incurred costs), and other fees. As these numbers total to around \$98 million, it appears that little, if any, of the loan went to fund new drilling or new construction.²⁹⁰

2. *This Bailout Appears to Violate the American Recovery and Reinvestment Act of 2009*

Not only does it appear that DOE purposely directed taxpayer funds to a failing enterprise, DOE’s action robbed taxpayers of genuine investment toward renewable energy. This loan guarantee bailed out lenders (TCW) and provided no assurance that TCW would apply the money that it recovered toward the economy or jobs as required by the American Recovery and Reinvestment Act of 2009.

Title XVI, Section 1602 of the American Recovery and Reinvestment Act of 2009, requires that “recipients shall also use grant funds in a manner that maximizes job creation and economic benefit.”²⁹¹ Paying off a creditor clearly does not maximize job creation and economic benefits. Rather, it provides an opportunity for private industry to exit an investment, deleverage and transfer the extraordinarily high default risk to taxpayers.

increase power production, subsequent to the first grant that will be partially funded by the John Hancock/DOE loan.”).

²⁸⁸ *Id.*

²⁸⁹ Loan Guarantee LGPO Loan Number: F1001, U.S. Dep’t of Energy, June 15, 2010 at. 4 (on file with author).

²⁹⁰ Nevada Geothermal Power, Inc., Conditional Loan Guarantee, U.S. Dep’t of Energy, Summary of Terms and Conditions at 4 Summary of Terms and Conditions (Stating “USE OF PROCEEDS: The proceeds of the Guaranteed Obligation will be used for following:

- (i) Partial repayment of intercompany loan from HoldCo in the amount of approximately \$80 million;
- (ii) Funding security requirements under the power purchase agreement signed on August 18, 2006 with NV Energy, f/k/a Nevada Power Company (“PPA”), either by posting cash collateral, cash collateralizing one or more letters of credit, or otherwise in accordance with the PPA in amount of \$3.8 million (the “PPA Credit Support”);
- (iii) Funding of the Debt Service Reserve Account in the amount of approximately \$5.5 million, Major Maintenance Reserve Account in the amount of \$125,000, and Drilling Expenditure Account in the amount of approximately \$8,400,000 (less amounts applied to reimburse the Borrower for Project Costs incurred prior to the Closing Date in connection with the Additional Wells (as defined below));
- (iv) The payment of certain fees and transaction expenses associated with the Guaranteed Obligation which are permitted to be paid with such proceeds under the Solicitation as set forth in Schedule 1; and
- (v) Initial funding of the Operating Account with all remaining proceeds of the Guaranteed Obligation.”).

²⁹¹ American Recovery and Reinvestment Act of 2009 §1602, Pub. L. No. 111-5.

For this reason, it appears DOE, in its very first FIPP section 1705-based loan guarantee, violated the spirit and, quite possibly, the letter of the law.

3. *Given the “Pari Passu” Deal Terms and the Required Consent of all Lenders to Reorder Priority, the Terms of the DOE Loan Guarantee Appear to Violate the Requirement of Superiority under Title XVII, Section 1702(g)(2)(B)*

The Summary of Terms and Conditions in the Conditional Loan Guarantee signed by Secretary Chu that relates to the Blue Mountain loan guarantee, at page 8, provides for a pari passu and pro-rata right of payment for senior creditors.²⁹² This means that the unguaranteed senior lender, John Hancock, stands equal to taxpayers in terms of recovering a share of their loss in the event of default. The Summary of Terms also requires the consent of all Lenders in the event that DOE seeks to “change to the priority of payment in the payment waterfall.”²⁹³ The combination of the pari passu credit terms, which ranked John Hancock as an equal to taxpayers, with DOE’s inability to reorder priority in case of a default, disables the ability of DOE to rely on its superiority as required under Section 1702(g)(2)(B).

4. *Nevada Geothermal’s Continuing Problems*

Since DOE finalized Nevada Geothermal’s loan guarantee in September 2010, the project continues to have operational and financial problems. The project has an ongoing problem with electrical fires. In January 2010 (before the loan guarantee), part of the Blue Mountain plant was damaged after electrical cables were placed too close together and burned; a significant amount of cable was destroyed and had to be replaced.²⁹⁴ In October 2011, another fire occurred because the seal on one of the pumps failed, causing part of the plant to go offline for major repairs.²⁹⁵ Operational problems at the Blue Mountain project resulted in revenue being less than estimated the last four months of 2011.²⁹⁶ Additionally, in November 2011, one of Nevada Geothermal’s major creditors considered placing Nevada Geothermal in default because of a late payment,²⁹⁷ and Nevada Geothermal lost \$3.9 million in the fourth quarter.²⁹⁸

F. Granite Reliable

In September 2011, Granite Reliable Power, LLC, a wind generation company owned by the Brookfield family of companies, received a partial guarantee for \$168.9 million loan from DOE.²⁹⁹ The funds will finance Granite Reliable Power Windpark, a wind generation project in

²⁹² Nevada Geothermal Power, Inc., Conditional Loan Guarantee, U.S. Dep’t of Energy, Summary of Terms and Conditions at 8.

²⁹³ *Id.* at 25-6.

²⁹⁴ Email from Max Walenciak, Nevada Geothermal, to Brian Fairbank, Nevada Geothermal, Mar. 1, 2010 (on file with author).

²⁹⁵ Email from Max Walenciak, Nevada Geothermal, to Thomas Pollog, DOE, Nov. 22, 2011 (on file with author).

²⁹⁶ Operations Budget Reviews, Nevada Geothermal, Sept.-Dec. 2011 (on file with author).

²⁹⁷ Email from Andrew Studley, Nevada Geothermal, Nov. 1, 2011 (on file with author).

²⁹⁸ *Nevada Geothermal Power Reports Dec Quarter Results*, Nasdaq, Feb. 28, 2012, available at <http://community.nasdaq.com/News/2012-02/nevada-geothermal-power-reports-dec-quarter-results.aspx?storyid=123602>.

²⁹⁹ DOE Loan Programs Office, Loan Guarantee Program Projects, available at <https://lpo.energy.gov/?projects=granite-reliable>.

Coos, New Hampshire.³⁰⁰ Unlike other loan recipients, Granite Reliable was a very profitable company without any demonstrated need to obtain a loan subsidy in order to secure private financing.³⁰¹ A deeper look into the players and circumstances surrounding this decision suggest that politics may have led DOE to approve the loan.

Until 2011, Granite Reliable was owned and controlled by Noble Environmental Power, Inc. Noble sold that 75% interest to BAIF Granite Holdings, Inc., just prior to the project's loan approval in September 2011.³⁰² BAIF Granite Holdings (BAIF) was created by Brookfield Renewable Power, a subsidiary of the \$3.2 billion company Brookfield Asset Management (BAM).³⁰³ Brookfield Renewable Power financed the creation of BAIF from its Brookfield Americas Infrastructure Fund, which reportedly has assets totaling \$2.7 billion.³⁰⁴ The remaining minority interest is owned by Freshet Wind Energy, LLC, which partnered with BAIF on the project.³⁰⁵ Given the solid financial background from which Granite Reliable was formed, it is unclear why DOE determined that the company needed a \$168.9 million loan guarantee.

1. Brookfield's Company Background: Board Members, Holdings, and Investors

One reason DOE determined a loan guarantee may have been necessary may lie in the inner workings of the BAM family of companies and the companies' strong Democratic ties. BAM owns BAIF, which owns Granite Reliable, as well as Brookfield Office Properties (BOP). BOP's Board of Directors is chaired by John Zuccotti, the man for whom New York City's Zuccotti Park is named, and includes Diana Taylor, New York City Mayor Michael Bloomberg's long-time girlfriend.³⁰⁶ George Soros and Martin J. Whitman, both prominent Democratic donors, are both heavily invested in Brookfield.³⁰⁷ Moreover, Heather Podesta, sister-in-law of Obama's influential White House transition director John Podesta, and the Podesta Group served as the lobbyists for BAIF.³⁰⁸

³⁰⁰ Press Release, *Department of Energy Finalizes Loan Guarantee of Nearly \$170 Million to Granite Reliable Power*, U.S. Dep't of Energy, available at <http://energy.gov/articles/department-energy-finalizes-loan-guarantee-nearly-170-million-granite-reliable-power>.

³⁰¹ See Opinion, *A NH Solyndra? Wind Farm Gets Fed Loan*, UNION LEADER, Sept. 28, 2011.

³⁰² Press Release, *Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project*, Noble Power, Dec. 7, 2010, available at http://www.noblepower.com/pressroom/documents/10-12-7_NEP-SignsAgreementForSaleOfNHWindProject_Final.pdf; Ehren Gossens, *Brookfield Picks RMT to Build New Hampshire's Largest Wind Farm*, Bloomberg, Feb. 12, 2010, available at <http://www.bloomberg.com/news/2011-02-23/brookfield-renewable-picks-rmt-to-build-new-hampshire-s-largest-wind-farm.html>.

³⁰³ Opinion, *A NH Solyndra? Wind Farm Gets Fed Loan*, UNION LEADER, Sept. 28, 2011.

³⁰⁴ *Id.*

³⁰⁵ Granite Reliable Power Wind Project, Brookfield Renewable Power, available at http://brookfieldrenewable.com/content/united_states/granite_reliable_power_wind_project-30823.html (last visited Mar. 15, 2012).

³⁰⁶ Board of Directors, Brookfield Office Properties, available at http://brookfieldofficeproperties.com/content/corporate_governance/board_of_directors-16350.html?Page=2 (last visited Mar. 15, 2012).

³⁰⁷ Steve MacDonald, *NH Wind Farm Project Comes with Inside Deal Making?*, Oct. 15, 2011, available at <http://www.allrightmagazine.com/environment/nh-wind-farm-project-comes-with-inside-deal-making-11752/#more-11752>.

³⁰⁸ Aaron Klein, *Look Whose Sister-in-law Just Secured \$135.8 Million Energy Loan*, Oct. 12, 2011, available at <http://kleinonline.wnd.com/2011/10/12/look-who%E2%80%99s-sister-in-law-just-secured-135-8-million-energy-loan-latest-%E2%80%98green%E2%80%99-company-with-deep-white-house-ties-to-get-massive-public-funds/>.

2. *Nancy Ann DeParle: Obama's Deputy Chief of Staff for Policy and Noble Interest Holder*

As described in Section V, Part B of this report, Nancy DeParle suffered a conflict of interest during her time in the Administration. As indicated on her financial disclosure forms, prior to joining the White House, Nancy DeParle was one of five managing directors of a multi-billion dollar private equity firm CCMP³⁰⁹ While with CCMP, she sat on the board of directors for Noble Environmental Power, LLC, one of CCMP's investments.³¹⁰ She served as a board member of Noble for about two years and quit in March of 2009.³¹¹ Noble owned Granite Reliable.

Coinciding with her tenure at the White House, DOE considered a loan guarantee for Granite Reliable. The Granite Reliable project was well underway by late 2009.³¹² Noble then sold Granite Reliable in December 2010 to Brookfield Asset Management, just 6 months prior to the conditional approval of the DOE loan guarantee and deep into the application process.³¹³ The DOE loan guarantee was conditionally approved in June 2011 and finalized in September 2011.

The ultimate approval of the DOE loan guarantee that followed the sale of Granite Reliable is tainted by DeParle's position within the White House and her financial interest in Noble. DeParle's position in the Administration could have been used to influence the successful sale by ensuring or increasing the likelihood of ultimate approval of the DOE loan guarantee. The loan guarantee would increase the value of the Granite Reliable, improving the sale price and, thereby, improving the investment of DeParle's son.

G. Record Hill Wind: DOE Uses the First Solar Precedent to Speed Through Another Questionably "Innovative" Technology

DOE relied on the First Solar precedent to approve Record Hill Wind's \$102 million loan guarantee project as "innovative," despite the project using commercial technology. DOE knew that the Record Hill project did not use significantly innovative technology. The Standard & Poor's credit rating for the project that DOE received clearly indicates the commercial (and non-innovative) nature of the project:

Record Hill has entered into a Turbine Supply Agreement for the shipment of 22 Siemens 93SWT[Siemens Wind Turbine] 2.3MW wind

³⁰⁹ CCMP Capital Advisors, LLP, *available at* <http://www.ccmcapital.com/> (last visited Mar. 15, 2012).

³¹⁰ See Noble Environmental Power, LLC, U.S. Securities and Exchange Commission, Form S-1, May 8, 2008, *available at* <http://www.nasdaq.com/markets/ipos/filing.ashx?filingid=5635802>.

³¹¹ Company Overview of CCMP Capital Advisors, LLC, Bloomberg Businessweek, *available at* <http://investing.businessweek.com/research/stocks/private/person.asp?personId=1090061&privcapId=28674590&previousCapId=35644&previousTitle=DaVita%20Inc>.

³¹² Federal Aviation Admin. Determination of No Hazard to Air Navigation, Nov. 18, 2009 (on file with author); Engineering, Procurement and Construction Agreement between RMT, Inc. and Granite Reliable Power, LLC, Apr. 26, 2010 (on file with author).

³¹³ Press Release, *Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project*, Noble Environmental Power, Dec. 7, 2010, *available at* http://www.noblepower.com/pressroom/documents/10-12-7_NEP_SignsAgreementForSaleOfNHWindProject_Final.pdf.

turbines to be installed at the site. **The SWT-2.3-93 turbine has been in operation in Europe since 2005, and the first turbines in the US were installed and began operations in 2006. Currently, there are a total 1,374 SWT-2.3-93 turbines operating worldwide....**

...Due to harsh winter conditions in Maine, the project plans to install a cold weather package on all turbines, which will keep the turbines running in cold temperatures. **Siemens' cold weather packages are currently in use on turbines in Canada, Norway, and other cold areas,** and have performed to expectations. Along with a cold weather package, the project expects to make use of Siemens proprietary Turbine Load Control (TLC) technology...**Given that the technology is software-based, however, and is not considered a fundamental component in the performance of the turbine,** the TLC could be shuttered without damaging the turbine if it does not work properly. In this case, the turbines would continue to run similar to Siemens' existing fleet.³¹⁴ (emphasis added)

Much like First Solar's "innovative" projects, the Record Hill Wind project attempted to categorize minor modifications to existing commercial technology as "innovativeness." DOE eventually agreed with Record Hill Wind's questionable reasoning. On December 14, 2010, Todd Shrader of DOE sent an email to several DOE personnel with the subject line "Eligibility Interpretation (sic)" that read:

An eligibility issue arose during the technical evaluation of Ocotillo Express (FIPP—F1033). This project is utilizing Siemens SWG-2.3-101 wind turbine generators. It is claimed to be a commercial technology based on the wide spread use (including in this country) of the closely related Siemens SWG-2.3-93 turbines, which are essentially the same just with smaller blade lengths (101 feet vs. 93 feet). Without looking deeper into the design differences (which will occur at due diligence), I concur with the applicant that this is a commercial technology. However, for Record Hill, which is using SWG-2.3-93 turbines, it is claimed that this is a new and innovative technology, partially based on no use over 5 years in the US for these turbines. I also believe there were some differences in internal controls. **However, the 101 and 93 units are essentially the same technology. Can the same technology be innovative under the Renewables Solicitation and Commercial under the FIPP's solicitation?**³¹⁵ (emphasis added)

Later in the day, Ruth Ku of DOE replied that the same question had occurred before with a different project and that the "project was asked whether it could obtain alternative financing in the private market...the project was able to get alternative financing (e.g., with John Hancock) and I think the recommendation was for it to move its application to FIPP...don't know where Record Hill is in its process for it to be

³¹⁴ Record Hill Wind, LLC., Standard & Poors Credit Report, July 1, 2011 (on file with author).

³¹⁵ Email from Todd Shrader, U.S. Dep't of Energy, Dec. 14, 2010 (on file with author).

feasible for it to apply under FIPP at this point.”³¹⁶ Ruth Ku forwarded her email to Douglas Schultz, a Program Manager at DOE’s Loan Programs Office. Douglas Schultz replied, “Record hill is well into due diligence with [D]avid [S]chmitzer. No reason to transfer at all. In terms of precedent of innovative and not **look no further than first solar where there [sic] panels are both innovative and noninnovative given the inverter used.**”³¹⁷ (emphasis added)

Ruth Ku agreed with Douglas Schultz but worried that submitting two project applications using the same technology as innovative and not innovative could cause a “policy issue for OMB.” She wrote back to Douglas Schultz stating “[I]t cld [sic] be a policy issue for OMB if record hill followed Ocotillo. Think it’s probably less of an issue if record hill was first then Ocotillo.”³¹⁸ After scheming about how to get the two applications through OMB without problems, DOE allowed the Record Hill Wind project to continue as an “innovative” project.³¹⁹ DOE would eventually finalize a \$102 million loan guarantee (guaranteed 100% by the federal government) in August 2011.

H. Genesis Solar: An Expedited Approval Process Now Threatens Entire Project

On August 20, 2011, DOE awarded NextEra Energy Resources LLC (NextEra) a partial loan guarantee for \$825 million to fund the Genesis Solar Energy Project (Genesis). A planned 250-megawatt plant to lie on 1,950 acres of federal land located outside Blythe, California, Genesis plans to power more than 187,500 homes by 2014.³²⁰ Standard & Poor’s gave NextEra a BBB+ rating, highly dependent on a long term Power Purchasing Agreement (PPA) with Pacific Gas & Electric (PG&E), and a Construction Completion Agreement with NECH, noting that if either’s credit ratings were downgraded in the interim, it would hurt Genesis’s rating as well.³²¹ S&P emphasizes that the loan guarantee would only support the project for up to a six month delay. Additional delays would restrict Genesis’s ability to meet the PPA and jeopardize the success of the project.³²²

An accelerated state and federal site approval process allowed the project to gain DOE approval, but the hasty work may now endanger the entire project. Genesis’s original site resided on a section of Ford Dry Lake, which archeologists suspected contained ancient cremation sites.³²³ To minimize delays, NextEra moved the project two miles north to a new site, still on federal land. DOE’s application process requires extensive vetting of project sites for a variety of environmental factors. However, to expedite site approval, NextEra opted for a less thorough process developed by the state energy commission (The Commission) and the Bureau of Land Management (BLM) that would “streamline the time necessary to produce the

³¹⁶ Email from Ruth Ku, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

³¹⁷ Email from Douglas Schultz, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

³¹⁸ Email from Ruth Ku, U.S. Dep’t of Energy, Dec. 14, 2010 (on file with author).

³¹⁹ DOE did not finalize a loan guarantee for the Ocotillo Express project.

³²⁰ Louis Sahagun, *Problems Cast Shadows of Doubt on Solar Project*, L.A. TIMES, Feb. 11, 2012, available at <http://articles.latimes.com/2012/feb/11/local/la-me-solar-foxes-20120211>.

³²¹ Genesis Solar LLC, Standard & Poor’s, July 21, 2011 ‘BBB+’ Rating (on file with author).

³²² *Id.*

³²³ *Id.*

joint cultural resources analyses...foregoing potentially lengthy investigations to evaluate the historical significance of the cultural resources found.”³²⁴

The Commission did warn Genesis of the potential consequences associated with the site approval process in August 2011, stating, “This approach however has the real potential to result in...delays in construction start-up, increase in requisite construction monitoring, and cost.”³²⁵ As part of the process, NextEra dug 500 test pits 3feet deep and found no artifacts, allowing them to proceed with construction.

After DOE granted final approval to the project and construction began, grading equipment unearthed grinding stones lying on a bed of charcoal, indicating possible evidence of human settlements. This discovery caused work to halt on 400 acres of the Genesis site while the company and regulatory agencies discuss various options. The hasty approval process that prevented the earlier discovery has compromised the construction schedule and put Genesis in serious jeopardy of not satisfying its obligations under the PPA. NextEra has admitted that these delays may have serious consequences for the project; according to a NextEra Senior Vice President, “the project could become uneconomical.”³²⁶

In addition to these problems, the new site also encroached on the habitat of the endangered Kit Foxes, native to the California desert. NextEra used “passive hazing” techniques approved by state and federal biologists to remove the foxes prior to site grading of the area. Essentially, NextEra sprayed coyote urine around dens and removed food sources. Two dead foxes were found on site in October 2011, which died from Distemper, a disease similar to Rabies spread by bodily fluids, never previously recorded in Kit Foxes. Ultimately, seven foxes died from NextEra’s removal process.

I. General Electric’s Broad Access to Loan Guarantees: Caithness Shepherds Flat, 1366 Technologies and Kansas City Southern Railway Company

General Electric (GE) sponsored a project called Caithness Shepherds Flat (Caithness), and also supplied the project with 338 wind-turbines. High level Administration officials expressed concern that the project was receiving an excessive amount of public subsidy, and that private parties did not have sufficient “skin in the game.” In a Memorandum for the President (“Summers’ Memo”) dated October 25, 2010, Carol Browner, Ron Klan and Larry Summers revealed concerns regarding excessive over-subsidization of the Caithness project, where grants, tax credits and loan guarantees provided 65% of the funding for the project. Because of the excessive subsidy, the memorandum reveals expectations of a 30% return to the

³²⁴ Letter from Mike Monasmith, Project Manager, California Energy Commission, to Scott Busa, Director, NextEra Energy Resources, LLC, Dec. 3, 2009, *available at* http://www.energy.ca.gov/sitingcases/genesis_solar/documents/2009-12-03_New_Alternate_Approach_TN-54332.pdf.

³²⁵ *Id.*

³²⁶ Louis Sahagun, *Problems Cast Shadows of Doubt on Solar Project*, L.A. TIMES, Feb. 11, 2012, *available at* <http://articles.latimes.com/2012/feb/11/local/la-me-solar-foxes-20120211>.

private investors generated on the backs of taxpayers.

Appendix: Shepherds Flat Loan Guarantee

The Shepherds Flat loan guarantee illustrates some of the economic and public policy issues raised by OMB and Treasury. Shepherds Flat is an 845-megawatt wind farm proposed for Oregon. This \$1.9 billion project would consist of 338 GE wind turbines manufactured in South Carolina and Florida and, upon completion; it would represent the largest wind farm in the country. The sponsor's equity is about 11% of the project costs, and would generate an estimated return on equity of 30%.

- Double dipping: The total government subsidies are about \$1.2 billion.

Subsidy Type	Approximate Amount (millions)
Federal 1603 grant (equal to 30% investment tax credit)	\$500
State tax credits	\$18
Accelerated depreciation on Federal and State taxes	\$200
Value of loan guarantee	\$300
Premium paid for power from state renewable electricity standard	\$220
Total	\$1,238

- Skin in the game: The government would provide a significant subsidy (65+%), while the sponsor would provide little skin in the game (equity about 10%).
- Non-incremental investment: This project would likely move without the loan guarantee. The economics are favorable for wind investment given tax credits and state renewable energy standards. GE signaled through Hill staff that it considered going to the private market for financing out of frustration with the review process. The return on equity is high (30%) because of tax credits, grants, and selling power at above-market rates, which suggests that the alternative of private financing would not make the project financially non-viable.
- Carbon reduction benefits: If this wind power displaced power generated from sources with the average California carbon intensity, it would result in about 18 million fewer tons of CO2 emissions through 2033. Carbon reductions would have to be valued at nearly \$130 per ton CO2 for the climate benefits to equal the subsidies (more than 6 times the primary estimate used by the government in evaluating rules).

Four months after DOE approved the Caithness loan, President Obama named Jeff Immelt, the CEO of GE, as the Chairman (Job Czar) of the President's Council on Jobs and Competitiveness (Jobs Council). As the Chairman of the Job Council, Immelt had direct access to President Obama.³²⁷ Since Immelt's appointment as Job Czar, two additional GE related

³²⁷ About the Council, President's Council on Jobs and Competitiveness, available at <http://www.whitehouse.gov/administration/advisory-boards/jobs-council/about> (Stating it shall, "Report directly to

government-backed transactions have occurred. First, the poorly rated 1366 Technologies, sponsored in part by GE,³²⁸ received a direct \$150 million loan commitment from DOE for its solar manufacturing plant.³²⁹ Second, on February 22, 2012, the Federal Railroad Administration (FRA) loaned \$54.6 million to Kansas City Southern Railway Company (KCSR) under the Federal Railroad Administration-administered Railroad Rehabilitation and Improvement Financing (RRIF) Program to purchase thirty new General Electric ES44AC diesel-electric locomotives.³³⁰

Regarding KCSR's purchase of GE locomotives, the railroad's filings with the Securities and Exchange Commission (SEC) reveal a twenty-five year, \$54.6 million loan at 2.96%.³³¹ KCSR received this loan despite reporting strong earnings. For the year 2011, KCSR reported operating income of \$612 million on \$2.1 billion in revenues, a 26% increase over the prior year – not the picture of a company in need of assistance in the form of a \$54.6 million loan.³³² As a result of this subsidized loan, the highly profitable KCSR gained a competitive advantage over its freight rail competitors.

VII. Breakdown of Problems with ATVM Loans

Each of the “Big Three” auto manufacturers, Ford, General Motors, and Chrysler, along with Nissan, applied for loans under the ATVM Program. Ford and Nissan are the only major manufacturers that received an ATVM loan. The companies received \$5.9 billion and \$1.4 billion respectively.³³³ Both General Motors and Chrysler withdrew their applications after waiting over a year for responses from DOE.³³⁴ Initially, financial viability was the primary roadblock that kept GM and Chrysler out of the running for Department of Energy loans.³³⁵ Some speculated that the entire program had been put on hold in order to give these two manufactures time to prove their financial viability and qualify for loans that would have drained

the President on the design, implementation, and evaluation of policies to promote the growth of the American economy...”).

³²⁸ See Sustainable Business, *GE Backs 1366 Technologies*, Mar. 4, 2011, available at <http://www.matternetwork.com/2011/3/ge-backs-1366-technologies.cfm>.

³²⁹ Press Release, *Energy Department Finalizes \$150 Million Loan Guarantee to 1366 Technologies that Could Drive Down Manufacturing Costs and Make American Solar More Competitive*, U.S. Dep't of Energy, Sept. 8, 2011, available at <http://energy.gov/articles/energy-department-finalizes-150-million-loan-guarantee-1366-technologies-could-drive-down>.

³³⁰ William Vantuono, *RRIF Loan Will Finance 30 KCSR Locomotives* Railway Age, Feb. 22, 2012, available at <http://www.railwayage.com/index.php/mechanical/locomotives/rrif-loan-will-finance-30-kcsr-locomotives.html>.

³³¹ Kansas City Southern Railway Company, Form 8-K Report, Feb. 22, 2012 (on file with author)

³³² Kansas City Southern Railway Company, Form 8-K Report, Jan. 23, 2012 (on file with author).

³³³ U.S. Dep't of Energy Loan Programs Office, Description of ATVM program, available at https://lpo.energy.gov/?page_id=43.

³³⁴ Benson Kong, *GM Withdraws DOE Loan Application, Speeds Up Volt Production*, Motor Trend, Jan. 27, 2011, available at <http://wot.motortrend.com/gm-withdraws-doe-loan-application-speeds-volt-production-26459.html>; Press Release, *Chrysler Group Statement Regarding Department of Energy Advanced Technology Vehicles Manufacturing Loan Application*, Feb. 16, 2012, available at <http://www.wkrm.com/story/16953247/chrysler-group-statement-regarding-department-of-energy-advanced-technology-vehicles-manufacturing-loan-application>.

³³⁵ Josie Garthwaite, *GM, Chrysler's Green Car Loan Bids Inch Forward, Face Upstart Competition*, May 14, 2012, available at <http://gigaom.com/cleantech/gm-chryslers-green-car-loan-bids-inch-forward-face-upstart-competition/>.

the program of remaining funds.³³⁶ In the end, both companies withdrew their applications, choosing instead to seek private financing. The other loan recipients are Fisker, Tesla, and The Vehicle Production Group, receiving \$529 million, \$465 million, and \$50 million, respectively.³³⁷ To date, the ATVM Program has loaned \$8.339 billion to five auto manufacturers for the production of ATVs.

It is unclear whether DOE has a set of objective standards by which it judges the relative merit of applicants. Based on materials obtained by the Committee, it appears that DOE applies inconsistent standards to each applicant, leaving innovative car companies in a state of perpetual uncertainty over how they will be treated under the process. These concerns are apparently shared by Senator Diane Feinstein, who wrote DOE complaining that, “On multiple occasions, the department has missed internal deadlines for initial decisions, term negotiations, final decisions and loan closure.”³³⁸ This haphazard administration of the ATVM Program creates confusion in the advanced technology vehicle market and may have actually hurt President Obama’s goal of fostering a new generation of vehicles.³³⁹

Despite an apparent lack of discernible objective criteria to judge the relative merit of loan applicants, it does appear that ties to the Obama Administration were important for those companies securing an ATVM loan early on in the process. Both Ford Motor Co. and Nissan were heavily engaged in negotiations with the Administration over fuel economy standards for model years 2012- 2016 at the time DOE was considering their applications.³⁴⁰ Both companies eventually expressed publically their support for these standards, which the Administration described as the “Historic Agreement.”³⁴¹ In addition to this curious timing associated with the approval of Ford and Nissan’s loan, the other recipients each enjoyed close ties to the Administration. For example, Fisker was backed by Kleiner, Perkins, Caufield & Byers, which has significant ties to the Administration.³⁴² One of the senior partners at Kliner Perkins is former Vice President Al Gore. Another partner, John Doerr, serves on Obama’s Council on Jobs and Competitiveness.³⁴³ In the case of Tesla, board member Steve Westly was a major Obama campaign bundler and a frontrunner for the position of Secretary of Energy.³⁴⁴

³³⁶ Edward Niedermeyer, *GM Withdraws \$14.4b Government Loan Request*, Jan. 27, 2011, available at <http://www.thetruthaboutcars.com/2011/01/gm-withdraws-14-4b-government-loan-request/>.

³³⁷ U.S. Dep’t of Energy Loan Programs Office, Description of ATVM program, available at https://lpo.energy.gov/?page_id=43.

³³⁸ Edward Niedermeyer, *Government Retooling Loans: On Hold for Gm and Chrysler?*, Jan. 24, 2011, available at <http://www.thetruthaboutcars.com/2011/01/government-retooling-loans-on-hold-for-gm-and-chrysler/>.

³³⁹ Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012.

³⁴⁰ Mike Allen & Eamon Javers, *Obama Announces New Fuel Standards*, POLITICO, May 18, 2009, available at <http://www.politico.com/news/stories/0509/22650.html>.

³⁴¹ *Id.*

³⁴² Al Gore Investment Partner, available at <http://www.kpcb.com/partner/al-gore> (last visited Mar. 15, 2012).

³⁴³ President’s Council on Jobs and Competitiveness, available at <http://www.whitehouse.gov/administration/advisory-boards/jobs-council/members/doerr> (last visited Mar. 15, 2012).

³⁴⁴ Lindsay Riddell, *Westly ‘Honored to be Considered’ for Obama Cabinet*, Sacramento Bus. J., Nov, 13, 2008, available at <http://www.bizjournals.com/sacramento/stories/2008/11/10/daily62.html>; Ronnie Greene, et al., *Energy’s Risky \$1 Billion Bet on Two Politically-connected Electric Car Builders*, iWatch News, available at <http://www.iwatchnews.org/2011/10/20/7152/energys-risky-1-billion-bet-two-politically-connected-electric-car-builders>.

Case Studies:

There has been very little activity in the ATVM loan program over the last three years, as DOE has only approved one loan since April 2010. Moreover, the Committee has yet to receive a response from DOE to its February 10, 2012, letter asking for additional information about the loan application process. Even so, the Committee has gleaned some information about the companies that DOE has considered for ATVM loans. These stories reveal the haphazard manner in which DOE is administering the program and how ever-changing goal posts and broken promises have promoted the misallocation of scarce resources and pushed some innovative companies into bankruptcy.

Aptera

Aptera first applied for an ATVM loan in December 2008, looking for money to fund the production of the Aptera 2e, a three-wheeled vehicle capable of nearly 200 miles per gallon.³⁴⁵ Although DOE rejected Aptera's original application for a loan because a three-wheeled vehicle did not meet the criteria of a Section 136 loan, Congress amended the program in October 2009, and Aptera resubmitted its application in January 2010 for both the 2e and a four-wheeled vehicle.³⁴⁶ By late 2010, DOE determined that the 2e would not be able to pay back capital costs.³⁴⁷ Accordingly, Aptera shifted its focus to the 4e, a four door electric sedan, that DOE believed would be more suited to an ATVM loan program.³⁴⁸ After numerous negotiations with DOE, in September 2011, Aptera received a letter from DOE offering them a conditional loan commitment of \$150 million if the company was able to raise \$80 million privately.³⁴⁹

Aptera shut down on December 2, 2011, citing the inability to raise additional private capital, having exhausted a bridge loan that was supposed to last through the time DOE made a final decision on the loan.³⁵⁰ At this point, Aptera's investors had funneled \$40 million of their own money into the project. Former Aptera CEO Paul Wilbur and former marketing Vice President Marques McCammon have publically asserted that the prolonged timeframe spent engaging with DOE to secure a loan ultimately consumed their cash reserves.³⁵¹ Wilbur stated that a "bright shiny object disease" characterized the ATVM Program and suggested in retrospect, "We should have raised the money ourselves rather than relying on DOE."³⁵² However, the loans given to Fisker and Tesla gave Aptera hope that DOE would eventually act on their application. More importantly, since the DOE continued to engage with the company

³⁴⁵ John Voelcker, *Aptera Collapse: How & Why It Happened, A Complete Chronology*, Dec. 12, 2011, available at http://www.greencarreports.com/news/1070490_aptera-collapse-how-why-it-happened-a-complete-chronology; Basem Wasef, *Aptera Unveils 200-mpg 2E Prototype*, Popular Mechanics, Apr. 12, 2010, available at <http://www.popularmechanics.com/cars/news/preview-concept/aptera-200-mpg-2e-prototype>.

³⁴⁶ John Voelcker, *Aptera Collapse: How & Why It Happened, A Complete Chronology*, Dec. 12, 2011, available at http://www.greencarreports.com/news/1070490_aptera-collapse-how-why-it-happened-a-complete-chronology.

³⁴⁷ *Id.*

³⁴⁸ *Id.*

³⁴⁹ *Id.*

³⁵⁰ *Id.*

³⁵¹ *Id.*

³⁵² *Id.*

throughout the time period, management was convinced that DOE was interested and willing to provide financing for the company.³⁵³

Bright Automotive

Bright Automotive was an Indiana company that developed a plug-in hybrid delivery vehicle that it planned to market to fleet customers.³⁵⁴ On February 28, 2012, Bright sent DOE a scathing letter announcing that they “have been forced to say uncle” and that it would withdraw from the ATVM application process.³⁵⁵

Bright applied for an ATVM Loan in December 2008 and its application was deemed “substantially complete” at that time.³⁵⁶ DOE continued to review the application for an additional 1,175 days.³⁵⁷ According to the company, Bright secured letters of support sent to Secretary Chu from large fleet vehicle users such as Cox, Comcast, and Bust Buy, and had order letters from Duke, Vectren, and Snap On.³⁵⁸

According to documents obtained by the Committee, on March 2, 2012, Lachlan Seward, then the Director of the ATVM Program, indicated to Bright that a loan for less than \$300 million would be quickly approved.³⁵⁹ In DOE’s next communication, DOE suggested that Bright partner with a large OEM in order to speed up the loan process, intimating that conditional approval would occur in “weeks, not months.”³⁶⁰ Pursuant to this advice, Bright entered into a strategic partnership with GM in July 2010.³⁶¹ At that time, DOE officials informed Bright that they would receive a conditional loan agreement within two months.³⁶² Two months later, DOE came back to Bright and directed the company to satisfy six additional loan pre-conditions.³⁶³ By January 2011, Bright received a “near final” conditional agreement for a \$314 million loan.³⁶⁴ It was reviewed by the DOE credit team for five months when on May 18, 2011, DOE determined that it would not consider Bright’s loan based on a volume consideration report generated by DOE, one that Bright had asked DOE to reassess.³⁶⁵ DOE contractors, A.T. Kierney, conducted a new volume study, which led to Bright’s reconsideration for a loan by DOE in June 2011.³⁶⁶ DOE once again assured Bright that just as soon as the company’s credit package went through the interagency process, it would receive an offer of

³⁵³ *Id.*

³⁵⁴ Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES blog, Feb. 29, 2012.

³⁵⁵ Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012 (on file with author).

³⁵⁶ Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, et. al. Dec. 27, 2011 (on file with author).

³⁵⁷ Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES Autoblog, Feb. 29, 2012.

³⁵⁸ Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, et. al. Dec. 27, 2011 (on file with author).

³⁵⁹ *Id.*

³⁶⁰ *Id.*

³⁶¹ *Id.*

³⁶² *Id.*

³⁶³ *Id.*

³⁶⁴ *Id.*

³⁶⁵ *Id.*

³⁶⁶ *Id.*

conditional agreement no later than October 2011.³⁶⁷ However, instead of an agreement, in October 2011, DOE told Bright to raise additional equity and perform other financial changes to bolster its balance sheet and credit.³⁶⁸ This last demand caused Bright to withdrawal from the ATVM loan process.³⁶⁹ In February 2012, the company closed down.

In their letter to the DOE, Bright's CEO Rueben Munger and COO Mike Donoughe flatly stated that the ATVM process distorted the U.S. private equity markets, effectively making DOE the only way for ATV companies to receive funding. According to Munger and Donoughe, DOE then used this position to submit the applicants to the control and "whim" of government bureaucrats.³⁷⁰ As the letter points out, the ATVM program, as DOE is administering it, contravenes the purpose of the program because it stymies rather than advances technology within the automotive market. After spending millions of dollars to comply with DOE's endless finish line and consuming nearly three years of time, Bright withdrew its application from the ATVM Program, closing the company and its idea.

Severstal

While DOE was stringing along potentially innovative auto manufacturers, they were working to approve a conditional loan agreement for a business that did not appear to qualify at all for the ATVM Program. In June 2011, DOE conditionally approved a \$730 million loan to steel company Severstal North America, a subsidiary of OAO Severstal, and a multibillion-dollar Russian steel and mining corporation. The ATVM loan would have financed Severstal's expansion and re-equipment of a Dearborn, Michigan, steel plant, located within Ford's manufacturing campus, to produce advanced high strength steel (AHSS). Chairman Issa challenged the appropriateness of this loan for several reasons: Severstal applied for a loan to produce AHSS, a material, not a "component part" as required under Section 136;³⁷¹ and it did not appear that the company needed public funding to "bring its product to market" as it was a subsidiary of a multi-billion dollar Russian corporation. Moreover, Severstal had already made significant strides towards completing the Dearborn project through private financing, even before receiving any money from DOE.³⁷² In its initial response to the Committee, DOE defended its due diligence and decision-making on the Severstal loan, touting the market strength of the company's product.³⁷³

On January 6, 2012, DOE reversed its position and denied Severstal's loan. When asked why it has changed its mind, DOE informed Committee staff, "We [DOE] could not get

³⁶⁷ *Id.*

³⁶⁸ *Id.*

³⁶⁹ Jim Motavalli, Citing Onerous Energy Dept. Loan Terms, Bright Automotive Says it Will Close, N.Y. TIMES Autoblog, Feb. 29, 2012.

³⁷⁰ Letter from Rueben Munger, Chairman and CEO Bright Automotive, and Mike Donoughe, Chief Operating Officer Bright Automotive, to Hon. Steven Chu, Secretary, DOE, Feb. 28, 2012 (on file with author).

³⁷¹ Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008) (to be codified at 10 C.F.R. pt. 611).

³⁷² Press Release, *Severstal North America Completes Asset Sale and Accelerates Capital Improvements*, Severstal North America, Mar. 31, 2011.

³⁷³ Letter from David G. Frantz, Acting Executive Director Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Committee on Oversight and Gov't Reform, Nov. 18, 2011 (on file with author).

comfortable with apparent discrepancies and potential of fluctuation in steel prices,” and therefore would not offer the loan to Severstal.³⁷⁴

This explanation is curious, as DOE offered the conditional loan agreement based on a forecasted increase in market demand for AHSS.³⁷⁵ DOE had originally projected Severstal to be the market leader in domestic AHSS production, even as other companies entered the American AHSS market.³⁷⁶ DOE decided not to give a final loan to Severstal and, in so doing, questioned the company’s ability to repay the loan. Based on the apparent contradiction between DOE’s analyses, it is obvious that DOE has no clearly established standard it uses to evaluate ATVM loan applicants.

Fisker

One of DOE’s original loans has been suffering severe setbacks in production, and many have predicted its eventual collapse.³⁷⁷ In April 2010, DOE issued an ATVM loan of nearly half a billion dollars to Fisker. DOE froze the loan in February 2012, halting the issuance of any further money, because the company failed to meet DOE’s benchmarks. Fisker’s woes began with regulatory issues and delays in production of the Karma, Fisker’s \$100,000 luxury sedan. Fisker has since engaged DOE to renegotiate its loan agreement and renegotiate benchmarks.³⁷⁸ Due to the financial troubles, including DOE’s freezing of the loan, Fisker has laid off 23 employees from its Delaware manufacturing plant³⁷⁹ and 40 employees and contractors in its California plant.³⁸⁰ In addition, Fisker recently announced that it was replacing founding CEO Henrik Fisker with Tom LaSorda, a former executive at both Chrysler and GM.³⁸¹ Furthermore, the Fisker Karma that *Consumer Reports* purchased to review broke down after less than 200 miles of operation and had to be towed 100 miles back to the dealer because the car would not even start.³⁸² Based on this reshuffling and DOE’s actions, Fisker appears to be a volatile company with a questionable future. Fisker’s current problems raise serious questions about DOE’s decision-making and an inconsistent standard in the ATVM Program.

ATVM Conclusion

DOE mismanagement of the ATVM Loan Program has put potentially viable companies out of business and caused major setbacks within the ATV market. DOE has only succeeded in

³⁷⁴ Interview with David G. Frantz, Acting Director ATVM Program, Jan. 13, 2012.

³⁷⁵ U.S. Dept. of Energy, ATVM Loan Evaluation – Severstal Dearborn Market Analysis, Mar. 22, 2010 (on file with author).

³⁷⁶ *Id.*

³⁷⁷ Eric Ruth, et al., *Can Fisker Keep its Promise?*, Delaware Online, Feb. 13, 2012, available at <http://www.delawareonline.com/article/20120213/BUSINESS09/302130001/Can-Fisker-keep-its-promise->.

³⁷⁸ Matthew Mosk, *Another Green Energy Company Stumbles: Fisker Announces Layoffs*, Feb. 6, 2012, available at <http://abcnews.go.com/Blotter/fisker-automotive-announced-layoffs/story?id=15524021>.

³⁷⁹ *Id.*

³⁸⁰ Associated Press, *Fisker Announces Layoffs as Automaker Misses Targets, has DOE Loans Frozen*, Feb. 7, 2012, available at <http://www.foxnews.com/leisure/2012/02/07/fisker-announces-layoffs-as-company-misses-targets-has-doe-loans-frozen/>.

³⁸¹ Dana Hull, *Fisker Automotive Replaces CEO with Auto Industry Veteran*, Mercury News, Feb. 28, 2012, available at http://www.mercurynews.com/business/ci_20062262.

³⁸² Tom Mutchler, *Bad Karma: Our Fisker Karma Plug-in Hybrid Breaks Down*, CONSUMER REPORTS, Mar. 8, 2012, available at <http://news.consumerreports.org/cars/2012/03/video-bad-karma-our-fisker-karma-plug-in-hybrid-breaks-down.html>.

giving billions of dollars to two large auto manufacturers and to companies with strong political connections to the Obama Administration. However, hundreds of other companies wait in DOE's loan queue. At least two of these companies have declared bankruptcy after engaging with DOE for a number of years, believing, based on representations from the Department, that they would eventually receive a government loan. Meanwhile, DOE conditionally approved a loan for a company that did not meet threshold requirement to be in the program. DOE's haphazard and inconsistent administration of the loan program has created significant uncertainty within the advanced vehicle manufacturing community and has potentially retarded progress on the next generation of automotive technologies.

Conclusion

The findings regarding the DOE loan programs discussed in this report tell only part of a much greater story—a story of mismanagement, waste and abuse symptomatic of reaching too far, working too fast, and spending too much to achieve unrealistic objectives. There are significant concerns about DOE's management and administration of the weatherization, 1705, and ATVM programs. And a management structure unprepared and incapable of dealing with the challenges it faced when pressed to push out the door tens of billions of dollars in a short period of time. In the days ahead, the Committee will continue its investigation and examine DOE's record on a loan-by-loan basis, with the continued hope that spotlighting these shortcomings will provide Congress and the American people with the insight they need to assess the true value—or cost—of these types of programs.